CHES STUDIES
A Special Report Series by
THE STATE CENTER FOR HEALTH AND ENVIRONMENTAL STATISTICS
P.O. Box 29538, Raleigh, N.C. 27626-0538

No. 89 January 1995

ADOLESCENT HEALTH IN NORTH CAROLINA: THE LAST 15 YEARS

by

Kathryn B. Surles

ABSTRACT

In response to growing concern about adolescent health issues, this report examines a wide range of health indicators for North Carolinians aged 10-19 years. Results show some positive trends: the percentages of pregnant adolescents entering early prenatal care and using ancillary prenatal services have increased; fetal and infant mortality among adolescent mothers has declined; and adolescent mortality from motor vehicle and other unintentional injuries has dropped. For most other indicators examined in this report, however, findings provoke concern about a wide range of health and social problems. These findings include rising levels of adolescent pregnancy, unmarried childbearing, sexually transmitted disease, homicide, suicide, and crime as well as high prevalences of behaviors and risk factors that often underlie those events. Accordingly, many county health departments now rank adolescent health issues among their top priorities. This study also reveals deep race and sex disparities in health outcomes and behaviors. These disparities must be a prime consideration in formulating prevention strategies.

Both a national initiative, *Healthy People 2000*, and a corresponding state initiative, *Healthy Carolinians 2000*, address some of the problems of adolescence through the formulation of health objectives for adolescents and young adults. The present report provides data for a number of those objectives and points up certain data deficiencies that need to be addressed (see Conclusion). Meanwhile, indicators from the biennial Youth Risk Behavior Survey (Department of Public Instruction) will be used to track progress toward the risk reduction objectives for the Year 2000.

The North Carolina General Assembly, through the Division of Maternal and Child Health, is now funding a limited number of school-based health centers and local adolescent pregnancy prevention programs, as described in this report. Based on present findings, expanded funding of those initiatives is amply justified and required.

This study was funded in part by the Comprehensive Adolescent Health Care Program, Division of Maternal and Child Health, North Carolina Department of Environment, Health, and Natural Resources.

INTRODUCTION

In the past, State Center studies of adolescent health have focused on pregnancy[1,2] and mortality.[3-5] In addition, a 1984 statewide survey[6] gathered information about unintentional injuries among children and adolescents and the associated knowledge, attitudes, and practices of their primary care givers.

More recently, momentum is growing in the state and nation for the development of research applications and intervention programs that address a whole host of unhealthy attitudes and behaviors that are developed in adolescence and may have short- or long-term negative consequences that affect individuals and society at large. *Healthy People 2000*[7] includes a large number of national objectives that target adolescents and young adults.

Following partial participation in 1990, the North Carolina Department of Public Instruction became a full participant in 1993 with the Centers for Disease Control in the national Youth Risk Behavior Survey (YRBS) of 9th-12th grade students. The purpose is to document the problems of adolescents in order to develop realistic programs for our children. The 1993 data for North Carolina youth have recently been released.[8]

In response to the growing concern about adolescent health and unhealthy behaviors in North Carolina, the North Carolina General Assembly is now funding, through separate grant application processes, local Adolescent Pregnancy Prevention Programs (APPPs) and Comprehensive Adolescent Health Care Projects (CAHCPs). The APPPs provide a variety of programs in local communities including abstinence programs, family life education, parent workshops, community awareness campaigns, male involvement efforts, and support services for teen mothers. A total of 39 projects are currently receiving the 5-year grants: 15 health departments, nine schools, seven local councils, and eight local nonprofit agencies. A total of 30 counties are represented.

The CAHCPs are school-based and school-linked health centers operating in middle and high schools in North Carolina. To date, 14 of these centers have been funded in 14 counties across the state. Eight of these are administered by local health departments, four by private non-profit health agencies, one by a school system, and one by the Eastern Band of Cherokee Indians. The aim of the CAHCP is to increase access to comprehensive health care for youth ages 10-19. Services include: acute care; management of chronic illnesses; mental health counseling; and preventive health services such as health education, medical and dental exams, and nutrition services.

Given the above, it seems prudent at this point to conduct a comprehensive examination of the entire spectrum of adolescent health. Hopefully, the data developed and examined here will prove useful to those involved in developing ways to improve adolescent health and those potential long-term effects.

A final word of introduction: In 1994, the national KIDS COUNT ranking of states placed North Carolina 40th. That means, based on a composite score for 10 key indicators of the well-being of young children and adolescents, North Carolina was the 11th worst state in the nation. Clearly, that result is intolerable to all North Carolinians!

TECHNICAL NOTES

For the population-based rates of this report, the population bases are estimates derived from the decennial censuses and provided by the Office of State Planning. The census figures used for this purpose are from the 100-percent tabulations whereas other census results cited may represent sample tabulations.

For infant deaths, only those matched to a birth certificate are used in this report, since mother's age is required. Race designation is that determined at birth. The numerator of an infant death rate is the number of deaths among infants **born during the**

period of study. Although 1992 deaths are now available, 1991 is the latest birth year for which infant deaths have been matched to a birth certificate.

Due to the statistical problem of small numbers, this report includes very little county-level data. Where those data are presented, it should be noted that many of the counties' rates or percentages may be unstable due to random fluctuation associated with small numbers.

Throughout this report, reference is made to those Year 2000 national health objectives that are specific for adolescents.[7] A complete listing of the national objectives for adolescents and young adults is provided in Appendix 1. This report is also liberally endowed with results from the 1993 Youth Risk Behavior Survey (YRBS),[8] which is described on page 30. Appendix 2 is the actual survey instrument. It should be noted that the YRBS results do not conform exactly to the Year 2000 risk reduction objectives but are related indicators for tracking North Carolina trends.

All data in this report are for residents of the state or county. Definitions and formulas for the terms and rates of this report are found in the Glossary, beginning on page 27.

POPULATION CHARACTERISTICS

In 1990, adolescents (ages 10-19) comprised 14 percent of the state's population — 13 percent of whites and 18 percent of minorities. These figures were down from 18, 17, and 22 percent respectively in 1980.

Table 1 shows, for race and Hispanic population groups, the 1990 numbers of adolescents by age and the overall percent changes since 1980. While the numbers of white and black adolescents declined, the number of American Indians rose. However, as noted elsewhere, race-identity practices appear to have changed during the 1970s and 1980s with increased numbers of people identifying themselves as American Indians.[10]

Although 11,807 Hispanics aged 10-19 were counted in 1990, almost 10,000 people aged 14-17 reportedly spoke Spanish or Spanish Creole at home in 1990, according to the census. Thus, the Hispanic figures of Table 1 very likely reflect undercounts.

In Figure 1, shadings depict, for four race-sex groups, the number of adolescents living in census tracts (metropolitan counties) or block numbering areas (nonmetropolitan counties) in 1990 (see Glossary). The state is comprised of a combined total of 1,492 census tracts (CTs) and block numbering areas (BNAs). The three categories of each map are approximately equal in terms of the number of subdivisions (CTs and BNAs) represented.

For each race group, the male and female maps of Figure 1 are very similar. The separation by sex is intended to aid those interested solely in female counts (for estimating family planning need). The reader will note the higher concentration of minorities (nonwhites) compared to whites in the eastern part of the state.

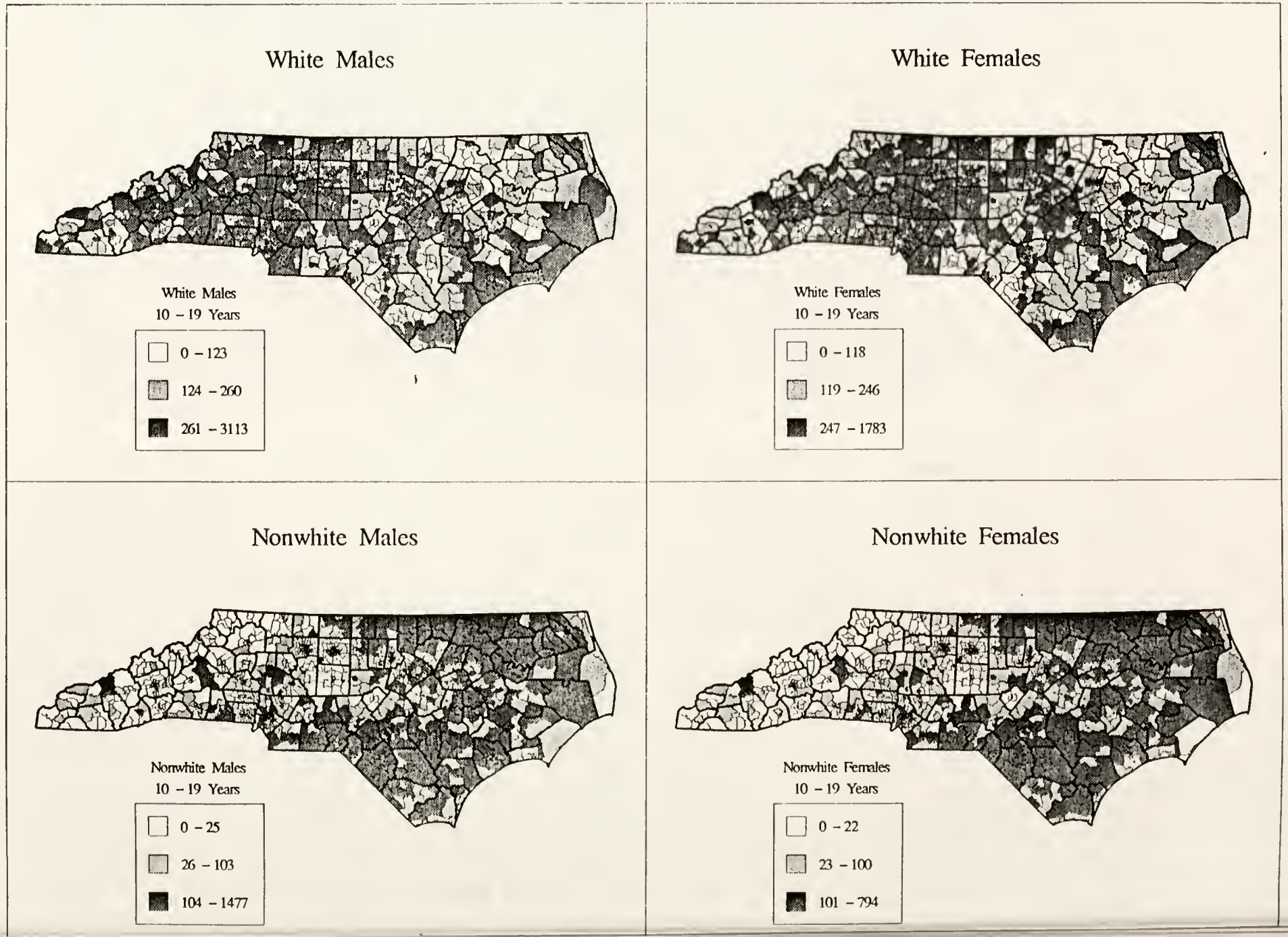
Other available 1990 census data for North Carolina adolescents are provided in Table 2. Given that availability and comparisons to 1980 are very limited, the following findings seem notable:

- Between 1980 and 1990, the percentage of minority adolescents living in rural areas declined 13 percent, further increasing the racial difference in urban-rural distribution. In 1990, the percentages of white and minority adolescents living in rural areas were 56 and 40 respectively.

- In 1989, poverty was much more prevalent among minorities aged 12-17 (30%) than among their white counterparts (8%).

- Between 1980 and 1990, the percentage of persons 10-17 not enrolled in school rose about 30 percent for each race group to 5.7 for whites and 6.7 for minorities.

Figure 1
Adolescent Populations by Census Tract and Block Numbering Area



- Among minority females 16-19, labor force participation rose 37 percent during the 1980s. All but white males experienced increases. In 1990, participation was higher and unemployment much lower among whites than minorities. More than one-fourth of minority adolescents in the civilian labor force were unemployed at the time of the 1990 census.

- Between 1980 and 1990, the percentage of females 15-19 who were married dropped 34 percent for whites and 41 percent for minorities. In 1990, white females aged 15-17 and 18-19 were far more likely to be married than were their minority counterparts.

- In 1990, one out of four children aged 12-17 lived in a single-parent household. Eighty-six percent of those children lived in households headed by a female.

Other data on the well-being of North Carolina's adolescents are taken from the national KIDS COUNT Data Book.[9] These indicators are for data year 1991:

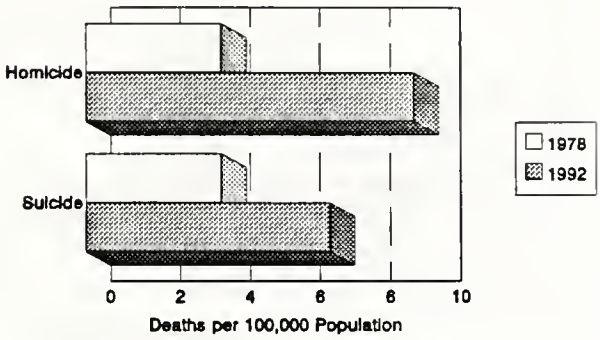
	United States	North Carolina
Percent graduating from high school on time	68.8	67.3
Percent teens not in school and not in labor force, ages 16-19	5.0	4.8

Adolescent population estimates for July 1, 1992 (the latest available) are given in Table 3. Corresponding data for counties are found in Table 4. These figures are used in the 1992 population-based rates of this report.

MORTALITY

Of all human events, probably none is more distressing than the death of a young person, especially when the death was preventable. Most adolescent deaths are due to social and behavioral causes as shown below.

FIGURE 2
Adolescent Homicide and Suicide Rates
North Carolina 1978 and 1992



Between 1978 and 1992, the state's adolescent death rate (ages 10-19) declined 17 percent, due largely to decreases in death from unintentional injuries. The motor vehicle death rate declined by one-third while the rate for other unintentional injuries dropped by one-half. Also during that period, however, the state's adolescent homicide and suicide rates rose about 140 and 80 percent respectively; see Figure 2. As a result, **external causes of death continue to account for three of every four adolescent deaths in North Carolina.** The remaining one in four is due most frequently to cancer, followed by heart disease and birth defects.

Table 5 compares age-race-sex-specific adolescent death rates for North Carolina (1992) to those for the U.S. (1991, the latest year available).[11] Major disparities involve higher North Carolina rates among minority males and females aged 10-14.

In its 1991 ranking of states, KIDS COUNT shows that 22 states had a higher "teen violent death rate" than North Carolina. That death rate for ages 15-19 included deaths from homicide, suicide, and accidents.[9]

Cause-specific death rates for U.S. adolescents are not available for recent years, but Table 6 examines the 1990-92 cause-specific state data by age and race-sex. As expected, death rates are generally much higher for older adolescents than

for younger, for minorities of both sexes compared to whites, and for males of both races compared to females. Minority male rates are especially high. Major exceptions are the higher suicide and motor vehicle rates among whites aged 15-19. Most remarkable are the racial disparities in homicide rates; at ages 15-19, the homicide rate for minority males is nearly ***13 times*** the rate for white males.

Concerning "other injuries," leading causes in 1992 were "conflagration (fire) in private dwelling" among decedents aged 10-14 and "accidental drowning and submersion" among decedents aged 15-19. Altogether, 13 adolescents drowned in 1992; all were male.

Due to the relatively small number of adolescent deaths, county-specific death data are not provided here. However, death counts by cause, age, and race-sex are available in the annual report, **Detailed Mortality Statistics**. Produced on microfiche, the county reports are available in county health departments or by request to the State Center.

Among the Year 2000 health objectives for the nation,[7] the only mortality objective targeting teenagers exclusively is to reduce suicide at ages 15-19 to a rate of 8.2 per hundred thousand persons (Objective 6.1a). The North Carolina rate was 10.7 in 1992.

Other mortality objectives target adolescents and young adults collectively. These call for the reduction of homicide among several subpopulations aged 15-34 and the reduction of total and alcohol-related motor vehicle fatalities at ages 15-24. See Objectives 4.1b, 7.1, and 9.3b of Appendix 1.

High-Risk Behaviors

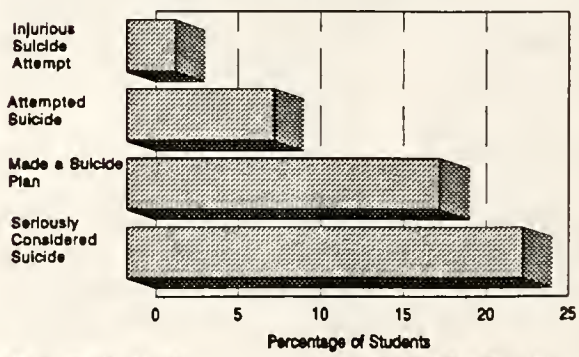
Motor Vehicle Injuries—The 1993 Youth Risk Behavior Survey[8] revealed the following about North Carolina high school students' behavior related to motor vehicles:

- Only 39 percent of students said they *always* wear a seat belt when riding in a car driven by someone else. The U.S. objective for all occupants of motor vehicles is at least 85 percent.
- Only 40 percent of motorcyclists said they *always* used a helmet when cycling during the past year. The U.S. objective for all ages is at least 80 percent.
- During the past month, one-third of students rode with a driver who had been drinking; nearly one-fifth of males reported drinking and driving themselves.

Suicide—In 1993, three percent of high school students in North Carolina reported an "injurious" suicide attempt during the past year, meaning the attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse. But many more said they had during the past year attempted suicide (9%), made a suicide plan (19%), or seriously considered suicide (24%) (see Figure 3). Females and younger students were most likely to report these suicidal thoughts or attempts; blacks were less likely than whites and other races. The related national objective is to reduce by 15 percent (to 1.8%) the incidence of injurious suicide attempts among adolescents aged 14 through 17 (Objective 6.2).

FIGURE 3

Percentage of High School Students Reporting Suicidal Thoughts or Attempts During Last 12 Months North Carolina 1993



Source: Youth Risk Behavior Survey, N.C. Department of Public Instruction, March 1993.

Homicide—Nationally, it has recently been reported that the homicide rate for black males aged 15-34 increased 55 percent between 1987 and 1991. The increase is almost entirely due to firearm homicides associated with drug trafficking; weapon carrying among young people has increased.[12] In North Carolina in 1993, 27 percent of high school students reported carrying a weapon (gun, knife, club) one or more of the past 30 days. Other student behaviors related to homicide are discussed in the next section.

VIOLENCE

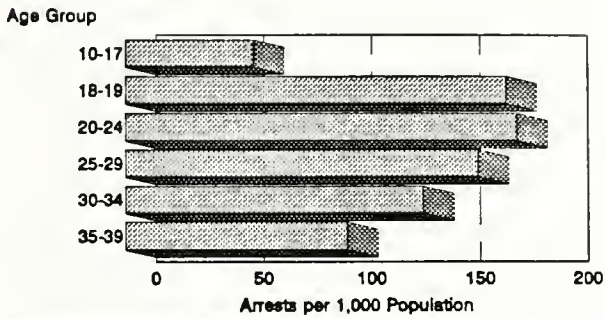
Violence has become a major public health priority in America as it exacts an increasing toll on the physical and mental health of individuals, families, and society at large. Adolescents are major contributors to that ever larger toll. Adolescents are also often the victims of violence; unfortunately, data on the associated morbidity and disability are not available. Nationally, it has been reported that one in 13 juveniles was the victim of a violent crime in 1992. The Justice Department study showed that youth aged 12-17 years were assaulted, robbed, and raped at a higher rate than any other age group, and the number of violent crimes involving victims aged 12-17 increased 24 percent between 1987 and 1992.[13]

Arrests

In its ranking of states, KIDS COUNT uses the "juvenile violent crime arrest rate" (ages 10-17) as one of its key measures of the well-being of children. In 1991, only 14 states had a higher rate than North Carolina. This followed a 1985-1991 rate increase of 118 percent in North Carolina compared to 50 percent in the U.S.[9]

Based on counts provided by the State Bureau of Investigation (SBI), Table 7 examines the state's 1992 age-specific arrest rates and those percent changes since 1978. While the arrest rate has declined at ages 40 and above, the rates for adolescents and young adults have risen greatly, with the rate for younger adolescents (10-17) rising more than fifty percent. The rate at ages 18-19 (176.4) now rivals the peak rate at ages 20-24 (181.3) as shown in Figure 4.

FIGURE 4
Arrest Rates for Selected Ages*
North Carolina 1992



*Age groups experiencing 1978-1992 increases.
Source of Arrest Counts: State Bureau of Investigation.

For total adolescents, the arrest rate increased 45 percent between 1978 and 1992, to 87 arrests per 1,000 persons aged 10-19. The adolescent rates for the following offenses **more than tripled**: embezzlement, stolen property, weapons violations, and liquor law violations. The adolescent rates for these offenses **more than doubled**: murder, robbery, aggravated assault, simple assault, arson, sex offenses, gambling, and disorderly conduct.

While these increases are staggering, it should be noted that arrest rates are subject to changes in laws and perhaps arrest practices. Among adolescents, for example, the 1992 DWI arrest rate was 43 percent **below** the 1978 DUI arrest rate, reflecting to some extent public response to the stricter law in effect in 1992. Similarly, the state's 1987 "prison cap law" could account for increased arrests due to repeat offenses by early parolees. An increased willingness to prosecute youthful offenders may also account for some of the increase in juvenile arrests.

Based again on counts available from the SBI, the 1992 offense-specific arrest rates for adolescent age-sex groups and for race groups aged 10-17 are provided in Table 8. While race-specific data for

older adolescents are not currently available, the SBI plans to acquire those data in the future.

It is seen in Table 8, as expected, that the 1992 arrest rates were generally much higher for older adolescents than for younger; higher for males than for females; and higher for minorities than for whites aged 10-17. The sex and race differentials were slightly greater for more serious (Part 1) offenses than for lesser (Part 2) offenses. However, age differentials were greater for Part 2 offenses. Arrests for fraud, offenses against family, and DWI were especially more likely among older than younger adolescents of both sexes.

Exceptions to the above patterns include excess rates of arson at younger ages (both sexes), motor vehicle theft at younger ages (females only), fraud and embezzlement among females (ages 18-19), and DWI and liquor law violations among whites (ages 10-17). An interesting observation is the almost identical male and female prostitution rates at both younger (10-17) and older (18-19) ages.

The race and sex differentials in murder arrests are highly notable. However, the reader should be aware here as elsewhere that low rates are based on small numbers of arrests and may not be reliable. The race and sex differentials observed in drug arrest rates are probably more stable.

Incarcerations

Between 1984 and 1992, the largest increase in statewide incarceration rates occurred among persons 18-19 years old. That 56 percent increase was twice the next highest increases of 28 percent at ages 35-39 and 40-44. At 16-17 years old, the 8-year increase was 25 percent.

Using counts provided by the Department of Correction, Table 9 examines the state's 1992 adolescent incarceration rates (state prison inmates per 100,000 population) by age and those percent changes since 1984 (earliest year available). While the rate for misdemeanors has declined by nearly three-quarters, the rate for felonies has risen 79 and 106 percent at ages 16-17 and 18-19 respectively. Particularly large increases involve homicide, robbery, and drug violations for both age groups. Notice that the 1992 rate for drug violations among youth aged 18-19 was nearly *15 times* its 1984 level. The increase was even greater among persons 16-17 years old whose rate was zero in 1984. At least part of the increase is due to increased law enforcement emphasis on drug activity.

According to a source at the Department of Correction,[14] the large decrease in the misdemeanor incarceration rate is largely an artifact of the 1987 law setting limits on the number of persons incarcerated. The law was implemented by releasing most misdemeanants soon after admission, thereby reducing the misdemeanant population by one-half.[14] Due to repeat offenses by early parolees, this law may also account for some of the increase in felony incarceration rates.

Violence and Safety at School

Twenty-seven percent of all 9th-12th grade students reported carrying a weapon (gun, knife, club) in the month prior to the 1993 YRBS. Compared to results obtained in a limited YRBS conducted in 1990, the percentages of 9th and 12th grade males who carried *guns* more than doubled over the last three years. The 1993 survey was conducted prior to the 1993 legislation making the possession of a gun at school a felony violation.

Other highlights of the 1993 YRBS include these about violence and safety at school:

- Nearly 40 percent of students were involved in a physical fight in the previous year; 15 percent reported fighting on school property.

- Thirty-five percent reported that some personal property had been stolen or deliberately damaged on school property during the past year.

- Ten percent reported being threatened or injured by a weapon on school property during the past year.

- Five percent of students reported staying at home one or more of the past 30 days because they did not feel safe at school.

Prevention

It is obvious that cooperation and integration across public health, mental health, criminal justice, social services, education, and other social support systems are essential to developing effective prevention strategies; health programs alone cannot deal with the problem of adolescent violence. With this in mind, public health has adopted a number of Year 2000 objectives in this problem area.[7]

Objectives addressing homicide and suicide among adolescents and young adults were noted in the preceding mortality section. The reduction of "rape and attempted rape" of young women is also addressed (Objective 7.7a).

Among the Year 2000 risk reduction objectives for adolescents are a number related to the use of alcohol, marijuana, and cocaine — behaviors that often underlie violence and abuse (see related discussion beginning on page 15.) Other objectives target the incidences of physical fighting and weapon carrying among adolescents aged 14 through 17 (Objectives 7.9 and 7.10).

REPRODUCTIVE HEALTH

Live Birth, Abortion, and Pregnancy Rates

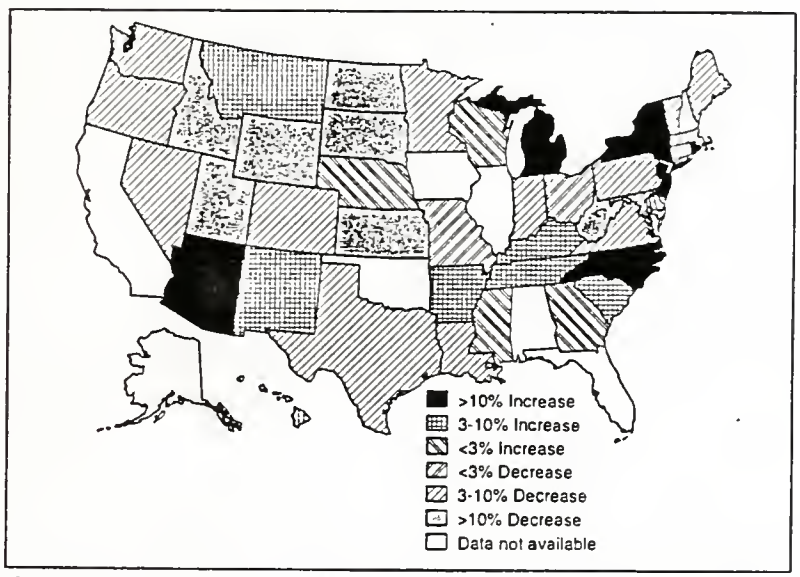
In this report, the year 1978 is used as the base since it was the first year of reliable abortion and pregnancy counts for adolescents (due to improved abortion reporting practices). Historically, 1978 marked a half decade of legally induced abortion and a full decade of federally subsidized family planning services in North Carolina.

Since early spontaneous abortions, or miscarriages, are not reportable in North Carolina, pregnancies are defined here as the sum of live births, fetal deaths, and induced abortions (see Glossary). The age-race-specific live birth, abortion, and pregnancy rates for 1992 and percent changes since 1978 are shown in Table 10. For white adolescents, birth rates remained the same and abortion rates dropped. However, the birth and abortion rates for minority adolescents increased at all ages except 10-14. The increase in the abortion rate was particularly large among minorities aged 18-19.

As shown in Figure 5, North Carolina was one of only six states (out of 40 reporting) in which the pregnancy rate for women 15-19 increased ten percent or more between 1980 and 1990. The state's

FIGURE 5

Percent Change in Pregnancy Rates for Females Aged 15-19*
United States, 1990 Compared with 1980



*The percent change was not statistically significant in Maine, Mississippi, Missouri, Montana, Nebraska, Ohio, and Wisconsin.

Source: *Morbidity and Mortality Weekly Report*, December 17, 1993

increase of 12 percent largely involved an increased birth rate, which rose 18 percent. Nine states (out of 50) experienced larger birth rate increases.[15]

Among the 40 states reporting abortions in 1980 and 1990, 20 showed statistically significant declines in the pregnancy rate of women 15-19; 26 showed statistically significant declines in the abortion rate of women 15-19.[15] A recent report by the Alan Guttmacher Institute[16] cites "better use of contraceptives" and "fewer pregnant girls having abortions" as contributing factors. The Institute's study found that at least 70 percent of sexually active American teenagers are using contraceptives regularly, a finding that seems contrary to common belief. At the same time, the study found that somewhat more than half of females and almost three-quarters of males have had sexual intercourse by their 18th birthday.

For females 15-17, Table 11 displays the 1988-92 total, white, and minority birth, abortion, and pregnancy rates for the state and counties. The numbers of events underlying the rates are found in Table 12. Counties should be wary of rates based on small numbers of events.

With relatively few pregnancies among girls aged 10-14, the county-level focus on ages 15-17 rather than 15-19 is due to greater economic and child health problems among the state's younger mothers and to reports of declining age at which adolescent sexual activity begins.[7,16] Among the Year 2000 national health objectives are targets of no more than 50 pregnancies per 1,000 females 17 and younger and no more than 120 pregnancies per 1,000 black females 17 and younger. From Table 10, the 1992 rate for N.C. girls aged 15-17 was above target at 67.4. The corresponding rate for minorities was below target at 107.8.

Repeat teenage pregnancy is a problem of major concern in North Carolina. In 1992, 15 out of each 1,000 girls aged 15-17 had a second or higher-order pregnancy. The rate for minorities (31.8) was four times the rate for whites (7.9). For both race groups, the trend has been generally upward over the last several years at least.[17]

County-level Attributable Risk for Adolescent Pregnancy

One of the criteria used by the Adolescent Pregnancy Prevention Program (APPP) to judge the feasibility of funding a local project is this: Is the project's home county a leading contributor to statewide adolescent pregnancy?

To answer this question, a statistical measure known as "attributable risk" (AR) is used to determine what percentage of the state's adolescent pregnancies would not have occurred if the effect of living in a particular county were absent. Details underlying the procedure are given elsewhere.[18]

The methodology used by APPP is to form a composite of the 25 lowest-rate counties against which to compare all other counties. The idea is that improvements in those low-rate (referent) counties would be less likely than improvements elsewhere.

With the referent group formed, both the **number** of adolescent pregnancies and the adolescent pregnancy **rate** in each nonreferent county are used to compute the county's percent attributable risk. The results for ages 10-19 in 1992 are displayed in Table 13 where the 75 nonreferent counties are ranked according to the size of AR. The 25 referent counties are then rank-ordered according to their adolescent pregnancy rates. Notice that the rate of 56.0 for the nonreferent group of counties is nearly 50 percent above the rate of 38.0 for the referent group of counties.

The interpretation of AR may be illustrated as follows: If Cumberland County's adolescent pregnancy rate (61.5) were reduced to the level of the referent counties' rate (38.0), the state would have 1.96 percent fewer adolescent pregnancies. AR is additive; therefore, the top ten AR counties have a combined AR of 12.37 percent and all 75 nonreferent counties have a combined AR of 28.05 percent.

Naturally, in choosing counties for an intervention program, the size of a county's AR would be of interest, though not necessarily one of the most important considerations.

Abortion Fractions

The abortion **rate** (discussed above) estimates the probability of a woman becoming pregnant **and** having an abortion. It may be compared to the birth rate. The abortion **fraction,** on the other hand, measures the probability of a pregnant woman having an abortion.

The statewide abortion fractions for adolescents and those 1978-1992 percent changes are displayed in the rightmost columns of Table 10. For ages 15-17 and 18-19, the fraction for whites decreased while that for minorities rose, especially at ages 18-19. At younger ages, however, pregnant minorities remain much less likely than whites to obtain an abortion.

A historical note of interest here concerns the State Abortion Fund, which was established in 1978 to pay for abortion procedures for poor women. The number of funded procedures peaked in FY 1984 at 6,645. Due to reduced funding, the number had dropped by FY 93 to 2,132. However, the fund nearly tripled in FY 94 to $1.2 million, making abortion more accessible to low-income women. Abortion counseling and family planning information must be provided to all individuals who request state abortion funds.[19]

Public Family Planning Services

In the spirit of "every child a wanted child," North Carolina became in 1937 the first state to include birth control as part of its public health program.[20] Many years later, in 1968, federally subsidized family planning services were first offered in North Carolina.

Family planning services do more than just prevent unintentional pregnancies. A 1992 State Center study[21] shows that pregnant women who previously participated in public family planning services were more likely than others to receive early and adequate prenatal care and to be involved in prenatal WIC and maternity care coordination (case management). They were also less likely than nonparticipants to deliver a low-weight infant.

Most efforts to improve birth outcomes in the United States have focused on the period of pregnancy, especially increasing the use of prenatal care. Preconceptional interventions may also be effective, however, because a healthy pregnancy begins ***before*** pregnancy. For this reason, the Institute of Medicine and others have proposed increasing the use of family planning services as a preventive strategy to combat high rates of low birthweight and infant mortality.[21]

In North Carolina in 1978, "active" public family planning patients numbered 90,337. A total of 25,905 (28.7%) were under 20 years old. For ages 15-19, about 23 percent of the estimated need was met. Estimates of need for public family planning services are from the Alan Guttmacher Institute.[22]

By 1992, the number of active public family planning patients under age 20 had risen to 44,924, representing 33.2 percent of total patients. For ages 15-19, about 34 percent of need was met, an increase of 48 percent since 1978.

In North Carolina, public family planning services are provided through the Women's Preventive Health Services Program, as described on page 20.

Selected Live Birth Statistics

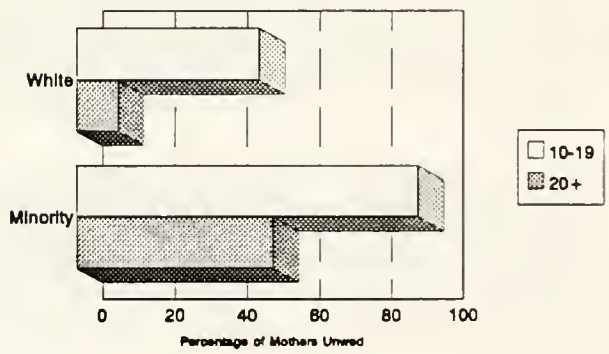
For adolescent age groups and total mothers aged 10-19, Table 14 shows by race the numbers of 1992 live births, selected percentages, and those changes since 1978. The categories shown are often associated with economic and child health problems among adolescent mothers.

The number of births to white adolescents and to minorities aged 15-17 was lower in 1992 than 15 years ago. This is due to reduced numbers of adolescents (Table 1) rather than reduced adolescent birth rates (Table 10).

The most dramatic change over the last 15 years is the rising percentage of adolescent mothers who are unwed. That percentage for whites nearly tripled, to 50.5, while the percentage for minorities rose 20 percent, to 94.5. The percentage increases were especially great at ages 18-19 compared to younger ages.

As expected, adolescent mothers are much more likely than older mothers to be unwed. The race-specific percentages for 1992 are displayed in Figure 6.

FIGURE 6
Percentage of Mothers Unwed by Race and Age
North Carolina 1992

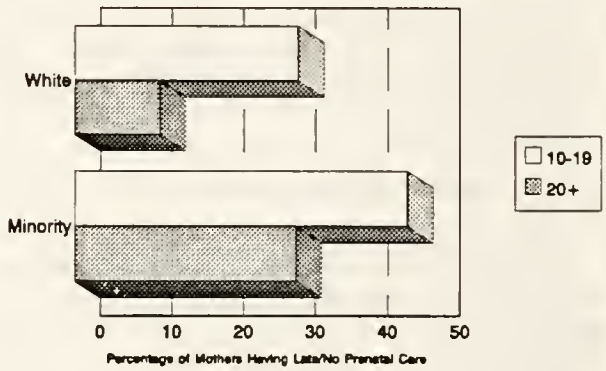


In its ranking of states, KIDS COUNT uses the "percent of all births that are to single teens" as one of its key measures of children's well-being. In 1991, only seven states had a higher percentage than North Carolina.[9]

As the percentage of births to unwed mothers has increased, so has the percentage of adolescent mothers having their second or higher-order pregnancy, as indicated approximately by birth order two or more. For each race group aged 10-19, that percentage rose 34 percent with even larger increases occurring among the state's very young mothers (ages 10-14). At all ages but especially younger ages, the minority percentage is much higher than the white.

On an encouraging note, the state's adolescent mothers of both races are less likely now than formerly to receive late or no prenatal care. Still, more than one-third of mothers 18-19 and higher percentages of younger mothers did not receive first-trimester care in 1992. Lack of early prenatal care is much more a problem of adolescents than older mothers and of minorities than whites, as shown in Figure 7.

FIGURE 7
Percentage of Mothers Having Late/No Prenatal Care by Race and Age
North Carolina 1992



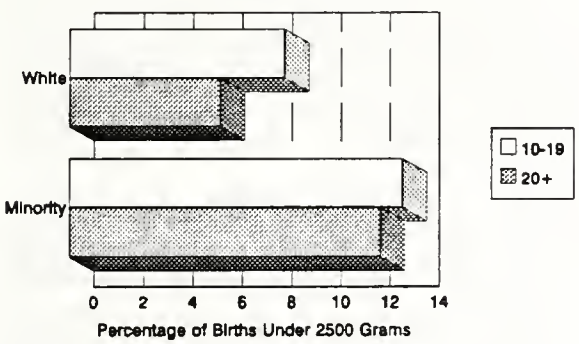
For the 5-year period 1988-92, Table 15 displays by race the adolescent numbers and percentages of late/no care for the state and counties. More than 60 percent of all adolescent mothers in Iredell, Lenoir, Scotland, and Wayne counties received late/no care. In another 18 counties, more than half of all adolescent mothers had late or no prenatal care. The Year 2000 national objective is that at least 90 percent of all women receive care in the first trimester.[7]

Finally, as among newborns in general, the babies of adolescent mothers have experienced little change over the last 15 years in the incidence of low birthweight (under 2500 grams). That percentage remains virtually unchanged for whites while decreasing only slightly (5.6%) for minorities

(Table 14). Low-birthweight rates among mothers aged 10-14 have decreased, however.

As shown in Figure 8, low birthweight remains a greater problem for adolescent than for older mothers, especially among whites. The white-minority differential in low birthweight is somewhat less pronounced among adolescent than older mothers, however.

FIGURE 8
Percentage of Births Under 2500 Grams by Race and Age
North Carolina 1992



Reporting on maternal smoking was added to the North Carolina birth certificate in 1988. As shown in Table 16, white adolescents giving birth in 1992 were far more likely to smoke than were their minority counterparts. Moreover, among whites, adolescent mothers (29%) were more likely to smoke than were older mothers (19%). The reverse was found among minorities; adolescent mothers (8%) were half as likely as older mothers (17%) to smoke.

Items related to maternal medical history have also been added to the birth certificate. However, for adolescents especially, the quality of those data and the small numbers involved preclude analysis at this time.

Enhanced Prenatal Care

Nonmedical prenatal services such as health and nutrition education and supplemental food programs have been shown to be effective in reducing poor pregnancy outcomes among low-income women.[23,24]

For adolescent age groups, Table 17 shows 1988-1992 trends in the percentages of white and minority live births by type of service received: Medicaid, WIC, and health department prenatal care. Increased percentages are observed throughout except that the percentages for health department prenatal care all declined in 1992, perhaps reflecting a shift of Medicaid mothers to care in the private sector.

For the services depicted in Table 17, the percentages are generally higher for younger than for older adolescents and higher for minorities than for whites, although the age and race gaps narrowed between 1988 and 1992. During this period, the income eligibility level for Medicaid rose from 100 to 185 percent of the federal poverty level, which served to increase the percentages of pregnant women receiving WIC and health department prenatal care.

Table 18 shows, for adolescent age groups, the 1988-1992 percentages of Medicaid births where prenatal WIC or maternity care coordination (case management) was received. Again, the percentages for younger and minority adolescents are higher than those for older and white adolescents. An increasing percentage of mothers in all age-race groups received maternity care coordination after the service was first offered in 1988. Still, in 1992, about one-half of eligible adolescents in each age-race group did not receive the service.

Efforts to increase the number of women on Medicaid who receive maternity care coordination and WIC should result in savings in the cost of newborn medical care. The studies cited above estimate that for every $1 spent on maternity care coordination, the Medicaid program saves $2 in early infant medical care costs; one dollar spent on WIC is estimated to save Medicaid $3 in newborn costs.[23,24]

The WIC program and the state's Maternal Health Program are described on page 20 of this report.

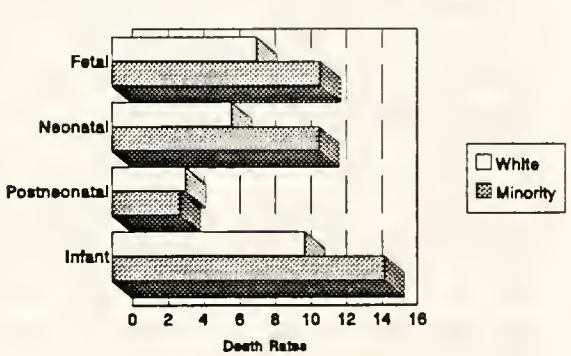
Fetal and Infant Mortality

For each type of death (fetal, neonatal, postneonatal, infant), Table 19 shows death rates by race and age for adolescent mothers giving birth in 1991. Due to small numbers, data for ages 10-14 are not shown separately. Generally, the minority rates are higher than the white, an exception being the higher postneonatal death rate among white mothers aged 15-17. Differences between younger and older adolescents are not as great as one might expect. In fact, the fetal and neonatal death rates are higher for white mothers aged 18-19 than for white mothers aged 15-17.

For adolescent mothers, Figure 9 depicts the fetal, neonatal, postneonatal, and infant death rates by race. Each of these rates represents substantial improvement over the last 15 years with the infant death rate for each race group down nearly 50 percent since 1978. The white fetal death rate has dropped least (12%) while the minority postneonatal death rate has declined most (60%).

FIGURE 9

Fetal, Neonatal, Postneonatal, and Infant Death Rates by Race
North Carolina Mothers 10-19, Birth Year 1991



For the 215 infant deaths among adolescent mothers (10-19) who gave birth in 1991, Table 20 shows the numbers and death rates for major causes of death by race.

Sexually Transmitted Diseases (STDs)

Compared to 1978, adolescents aged 10-14 in 1992 experienced increased rates of syphilis and gonorrhea while older adolescents experienced an increased syphilis rate (up 173%) but reduced gonorrhea rate (down 17%). The gonorrhea reduction involved all race-sex groups aged 15-19 except minority males whose rate rose 65 percent.

Assuming consistent reporting practices over time, the observed increases are disturbing. Also disturbing are the state-national differentials observed in gonorrhea. Compared to the U.S. in 1991 (latest year available),[25] the state's 1992 gonorrhea rate was 115 percent higher at ages 10-14 and 80 percent higher at ages 15-19. Differences in racial distribution may account for some of the state's apparent excess.

For syphilis, gonorrhea, and chlamydia (the last not reportable until 1986), Table 21 examines the state's 1992 adolescent incidence rates in age and race-sex detail. Wide disparities are observed with older adolescents, females of both races, and minorities of both sexes exhibiting exceedingly high rates. The one exception is the approximately equal rates of gonorrhea among minority males and females aged 15-19.

While the age-race-sex differentials are striking, the reader should keep in mind that **infectious disease counts are subject to testing and reporting biases, which tend to underrepresent people tested in the private sector.**

In general, STD rates are higher at ages 20-24 than at younger ages. For white and minority females, however, the 1992 rates of gonorrhea and chlamydia both peaked at ages 15-19.

Concerning adolescent AIDS, three cases aged 15-19 were reported in 1992: two were white males, one a minority male. ***Many more individuals actually acquire the HIV infection during adolescence, however.***

The only Year 2000 national health objective directly addressing adolescent STDs is to reduce the gonorrhea rate at ages 15-19 to no more than 750 per 100,000 (Objective 19.1b). From Table 21, the corresponding state rate was more than twice as high at 1,675 in 1992.

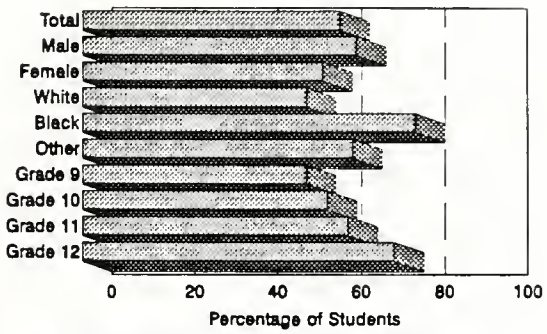
Sexual Behaviors

The 1993 statewide survey of high school students (YRBS) revealed the following behaviors related to adolescent sexual activity. Other details by gender and by age, grade, and race are available from the Youth Risk Behavior Survey.[8]

- Sixty-two percent of students said they had had sexual intercourse. Percentages were higher for males, minorities, and grades 11 and 12 (see Figure 10).
- Thirty-nine percent of students were sexually active by age 15, 59 percent by age 17.
- Among sexually active students, 28 percent had had only one partner, 22 percent had had six or more; 15 percent said they drank or used drugs prior to their last sexual intercourse; 81 percent said they or their partner used some method of birth control at last intercourse (includes withdrawal); 51 percent said they or their partner used a condom at last intercourse.
- Eight percent of males reported they had gotten someone pregnant at least once. Nine percent of females said they had been pregnant at least once.
- Seven percent of both males and females said they had ever been told by a doctor or nurse that they had a sexually transmitted disease.

National objectives targeting reduced adolescent sexual activity and protected sex among sexually active adolescents are listed in Appendix 1, Objectives 5.4-5.6, 18.4a, and 18.4b.

FIGURE 10
Percentage of High School Students
Who Ever Had Sexual Intercourse
North Carolina 1993



Source: Youth Risk Behavior Survey, N.C. Department of Public Instruction, March 1993.

ALCOHOL, TOBACCO, AND OTHER DRUG USE

Data from the 1993 Youth Risk Behavior Survey show that alcohol continues to be the drug most frequently used by high school students in North Carolina. Nearly three-quarters of students reported ever using it, and 44 percent reported use in the past 30 days (Figure 11). Other significant findings for alcohol use include these:

- Nearly one-quarter of students participated in binge drinking (5 of more drinks on one occasion) during the last month.
- During the past month, one-third rode with a driver who had been drinking and nearly one-fifth of male students reported drinking and driving themselves.
- One in five students reported that parental drinking had caused them problems in the past year.

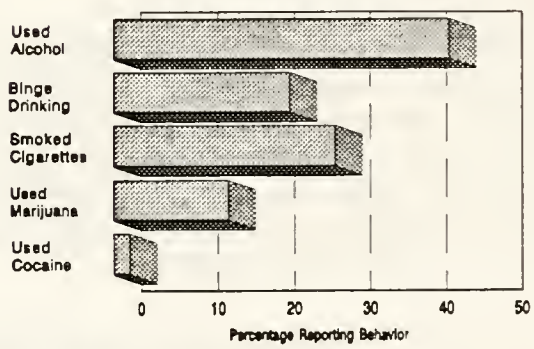
Concerning tobacco use, 56 percent of all students had ever smoked cigarettes with 29 percent smoking in the last month (Figure 11). Blacks were less likely than others to smoke and to use smokeless tobacco.

Nearly 30 percent of students reported ever using marijuana with 15 percent using it in the past month (Figure 11). Ever-use of marijuana, cocaine, and steroids was higher among students of other races than among whites and blacks.

A particularly notable finding may be that nearly half of high school students reported they had never or only once during the past year received information about alcohol or drugs in health or other school classes. *Further*, nearly 60 percent reported that never or only once in the past year had they received information from their parents about alcohol or drugs.

FIGURE 11

Percentage of High School Students Reporting Specified Behavior During Last 30 Days
North Carolina 1993



Source: Youth Risk Behavior Survey, N.C. Department of Public Instruction, March 1993

National objectives for substance use/abuse are numbers 3.5-4.11 of Appendix 1.

NUTRITION

Overweight

Overweight is a major cause of preventable disease. The greatest health risk of overweight in adolescence is its persistance into adulthood and the resulting risk of heart disease, diabetes, and stroke.

Body Mass Index (BMI) is calculated by dividing weight in kilograms by the square of height in meters. The cutpoints used to define overweight are the age-sex-specific 85th percentile values for the combined samples of U.S. children examined in the first two National Health and Nutrition Examination Surveys (NHANES I and NHANES II, 1971-1980).[26]

Data from NHANES II and NHANES III show that 15 and 21 percent of U.S. adolescents aged 12-19 were overweight in 1976-80 and 1988-91 respectively.[7,27] The U.S. objective for adolescent overweight is to prevent an increase above the 1976-80 baseline of 15 percent (Objective 2.3 in Appendix 1).

Using 1988-91 data from the state's Child Health Program (see page 19), Table 22 shows, for each age and sex, the numbers and percentages of total, white, and black adolescents above the NHANES 85th percentile. The numbers of cases were insufficient to examine the data for American Indians and Hispanics.

The percentages of Table 22 will be used as baselines against which to compare future prevalences of overweight among health department adolescents. Compared to 29.3 percent in 1988-91, the overall prevalences of overweight among Child Health Program participants aged 12-18 were 30.8 and 29.6 percent in 1992 and 1993 respectively.

Risk Factors

The following data are again derived from the 1993 YRBS:

- Asked about foods they consumed the previous day, the following percentages of high school students said they did **not** eat the specified foods: fruit or fruit drink, 32%; green salad or raw or cooked vegetables, 46%; hamburger, hot dogs, sausage, or barbecue, 48%; French fries or potato chips, 36%; cookies, doughnuts, pie, or cake, 40%. Males and blacks were more likely than females and whites to eat the "high-fat" foods.

- Asked about their body weight, 19 percent of students said they were slightly or very underweight, 33 percent said slightly or very overweight.

- Compared to the opposite sex, males (33%) were more likely trying to gain weight, while females (55%) were more likely trying to lose weight.

- To lose or keep from gaining weight, the following percentages of students reported the specified behavior during the past 7 days: dieted, 6%; exercised, 23%; exercised and dieted, 15%; made themselves vomit, 2%; took diet pills, 2%; vomiting and diet pills, 1%.

PHYSICAL FITNESS

Conducted in 1992, the North Carolina Children and Youth Fitness Study (NCCYFS)[28] was designed to measure the physical fitness and physical activity patterns of children in grades 1, 3, 6, and 9. Comparing these results to corresponding information from national surveys reveals that North Carolina children have lower scores on most fitness measures, especially body composition, cardiorespiratory, and flexibility tests. The NCCYFS also revealed that North Carolina parents seldom exercise with their children and that schools offer physical education only one day per week on average. The study showed that a child's fitness assessments were correlated with his television viewing time and his parents' activity levels.

From the 1993 YRBS, the following results relate to physical activity levels reported by high school students:

- Twenty percent of high school students reported that, during the seven days preceding the survey, they did **not** exercise or participate in sports activities for at least 20 minutes that made them sweat and breathe hard. The percentage was higher for females (28%) and blacks (26%) and increased with advancing grade level to 26% for seniors, as shown in Figure 12.

- Compared to doing aerobic activities, students were even less likely to do exercises to strengthen or tone their muscles.

- More than half (53%) of all high school students and three-quarters of juniors and seniors said they attended no physical education (PE) classes during an average school week.

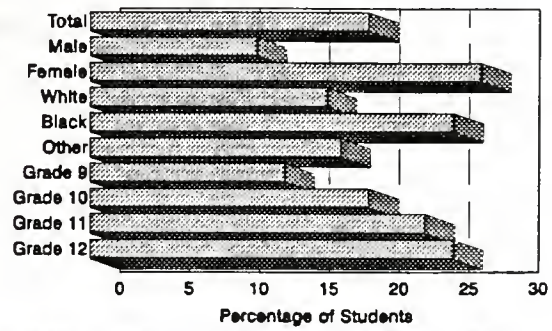
- Among those taking PE, 80 percent reported exercising or playing sports for more than 20 minutes during an average class.

- Nearly 60 percent of students said that, outside PE, they had played on **no** school sports team during the past year. The percentage was higher for females, minorities, and seniors.

In Appendix 1, Objectives 1.3 and 1.4 establish fitness goals for youth. The NCCYFS and YRBS results should provide the necessary impetus for improving the quantity and quality of physical education in North Carolina schools. For more information, contact Shellie Pfohl, Executive Director of the North Carolina Governor's Council on Physical Fitness and Health, at (919) 733-9615.

FIGURE 12

Percentage of High School Students Who Reported No Episode of Aerobic Exercises During Last 7 Days North Carolina 1993



Source: Youth Risk Behavior Survey, N.C. Department of Public Instruction, March 1993.

ORAL HEALTH

A stratified cluster sample of North Carolina public school classrooms in school year 1986-87 resulted in a total of 3,076 oral examinations of adolescents aged 12-17 years.[29] Results showed a substantial decline in decayed, missing, and filled teeth (DMFT) scores compared to a decade earlier. For whites, DMFT scores declined from 5.9 in 1976 to 3.1 in 1986. For minorities, the corresponding decline was from 4.7 to 2.9. Scores were particularly high for some population groups such as 17-year-old minority females.

For all ages 12-17 years, minorities had sealants about half as often as whites, and gum disease was more prevalent among minorities. Minorities had a strikingly higher prevalence of tartar above and below the gum line, and the prevalence of receding gums was also higher among minorities than whites.

As specified in Appendix 1, Year 2000 health objectives for the nation's adolescents include three related to oral health. They call for the reduction of dental caries, the reduction of untreated dental caries, and an increase in protective sealants on the occlusal (chewing) surfaces of permanent molar teeth. See Objectives 13.1, 13.2, and 13.8.

CAHCP SURVEYS

Beginning in Fall 1994, certain schools associated with the Comprehensive Adolescent Health Care Projects (CAHCPs) are conducting independent surveys of students and their parents in order to examine adolescent health and risk behaviors in relation to the use of school-based health services. The student survey will provide a profile of who uses (does not use) what services, users' levels of satisfaction with the services, and the effect of the services on users and their families. The data from 1994 will be used for planning purposes and for baselines against which to measure changes over time.

USE OF HEALTH SERVICES

Many adolescents lack access to health care. Many are without health insurance of any kind, or their insurance programs cover few if any preventive health services. The Southern Institute on Children and Families reports that an estimated 89,000 North Carolina youths aged 11-17 had no health insurance in March 1991.[30] This number represents about 15 percent of the population aged 11-17.

Meanwhile, data on the use of resources are very limited in North Carolina. Except for publicly funded services, we have no data on the use of hospital outpatient and nonhospital health services. The North Carolina Medical Database Commission (MDC) expects to acquire those data in the future, however. Data on same-day surgeries are only months away, and data on services provided through home health and by physicians' offices are expected to follow. Eventually, the MDC hopes to establish a statewide medical claims clearinghouse to collect data on all types of health services.

In the meantime, here is what we do know about the use of health care resources by the state's adolescent population.

Hospital Discharges

Data on hospital inpatient services are routinely collected by the Medical Database Commission. Age-specific data are not routinely available, however.

For selected primary diagnoses, Table 23 provides numbers and rates for adolescents discharged from North Carolina hospitals during 1991, the latest year for which data were accessible. Childbirth and reproductive complications accounted for 43 percent of adolescent hospitalizations; mental disorders and injury/poisoning each accounted for just over 10 percent, genitourinary diseases for under five percent. Pulmonary diseases and diabetes were next most frequent among the selected diagnoses.

The most frequently reported mental disorders were "affective psychoses" followed by "adjustment reaction." Among injuries and poisonings, "poisoning by analgesics, antipyretics, and antirheumatics" was the leading diagnosis followed closely by several specific fractures. "Inflammatory disease of female pelvic organs" and "infections of kidney" led the list of genitourinary diseases, and asthma was by far the most frequently reported chronic pulmonary disease.

Patient's race and the external cause of injuries are not included in hospital discharge reporting. These data are needed to document the racial and cause-of-injury factors associated with adolescent hospital morbidity.

An examination of the rates of Table 23 is left to the interested reader.

Health Check: Healthy Children and Teens Program

Formerly called Early and Periodic Screening, Diagnosis, and Treatment (EPSDT), this program for Medicaid-eligible youth (ages 0-20) is administered by the Division of Medical Assistance, N.C. Department of Human Resources.

In FY 89 (earliest year of unduplicated counts), a total of 7,259 youth aged 10-18 years were screened. By FY 93, that number had increased 36.5 percent to 9,905. In FY 93, county health departments performed 18 percent of the screenings of adolescents compared to 31 percent of the screenings of younger children.

Depending on financial and medical eligibility, Medicaid may pay for a variety of health services for adolescents.

Mental Health/Substance Abuse

Based on data provided by the Division of Mental Health, N.C. Department of Human Resources, the numbers of North Carolina adolescents in state institutions for treatment of substance abuse and mental illness have declined (Table 24). At the same time, the number of youth served by area mental health centers increased markedly between FY 1984 (earliest year of comparable data) and CY 1992 (Table 25). The number treated for substance abuse tripled while the numbers treated for mental illness and developmental disability rose 53 and 34 percent respectively. The substance abuse and mental illness increases were especially great for younger and minority youth. These increases occurred over a period in which the adolescent population generally declined.

Health Services Information System (HSIS)

HSIS is an automated reporting system used by local health departments and special contract providers (over 700 sites) to report on the delivery of public health services. Data for HSIS programs that serve a sizable number of adolescents are given below. These programs are administered by the Division of Maternal and Child Health.

Child Health Program

The primary objective of this program is to provide health services to children from birth up to 21 years of age. Both screening and treatment services are provided through local health departments. In 1992, a total of 4,727 screening services and 9,131 other services were provided to persons aged 12-20 years.

Children's Special Health Services (CSHS)

Formerly called the Crippled Children's Program (1936-1985), CSHS provides comprehensive health care for financially and medically eligible youth (ages 0-20) with chronic disabling conditions. It involves a network of specialty clinics located in health departments, medical centers, developmental evaluation centers, and private physicians' offices.

In FY 93, a total of 2,569 youth aged 12-19 years were served in the clinics: 68% in orthopedic, 19% in speech and hearing, 7% in neurology, and 2% in cardiology. The remaining 4% were seen in neuromuscular, oral/facial, pulmonary, myelodysplasia, and hematology/oncology clinics.

CSHS also provides reimbursement for office visits, hospitalizations, therapy, drugs, equipment, and other services for eligible youth. In FY 93, reimbursement was made for 2,441 adolescents aged 10-19 years.

Maternal Health Program

Through local health departments, most of the state's 100 counties provide prenatal and postpartum clinical examinations, counseling, and supervision to pregnant women. A network of 18 high-risk maternity clinics has been established; these serve mainly multi-county areas and provide multidisciplinary care to high-risk patients.

Between FY 1985 and CY 1992, the number of adolescents served by the program more than doubled, nearly tripling at younger ages (under 18).

In 1992, clinic and other maternity services numbered 62,816 for women under age 18 and 79,261 for women aged 18-19. More than half of the services were clinic visits, about 40 percent were for maternity care coordination. See Table 18 and the corresponding discussion on page 13 concerning Medicaid mothers' use of maternity care coordination.

Supplemental Food Program for Women, Infants, and Children (WIC)

Funded by the U.S. Department of Agriculture, this program provides nutrition education for low-income women and children and vouchers for the purchase of specific foods and infant formula. Eligible persons include pregnant/breastfeeding/postpartum women and children up to age 5 who are at medical or nutritional risk.

For adolescents who delivered a liveborn infant in 1992, Table 26 shows the percentages of prenatal WIC participants by race, marital status, and education. As already described, trends in prenatal WIC participation are given in Table 17 (all adolescent mothers) and Table 18 (Medicaid adolescent mothers).

Women's Preventive Health Services Program

Also known as "family planning," these services include contraceptive care, preconceptional risk assessment, counseling and referral, health screening, and basic infertility evaluation. These services are targeted to low-income women.

For adolescent age groups, Table 27 shows percentages of 1992 patients by race, marital status, education, poverty status, Title XIX (Medicaid) reimbursement, and contraceptive method. For adolescents as a whole, family planning patients are predominantly not married, not (yet) high school educated, and below 100 percent of poverty. A high percentage use birth control pills.

ADOLESCENT HEALTH AS A LOCAL PUBLIC HEALTH PRIORITY

Each biennium in North Carolina, statisticians from the State Center provide data and conduct workshops to assist local health departments in a needs assessment process called *Community Diagnosis*. After data analysis and other local considerations, health departments then report to the state health director **up to five** priority health problems for each county. Those results are reported in turn to state and regional staff who may assist a county in developing and implementing its proposed interventions.[31]

In 1994, this process resulted in 31 of the state's 100 counties identifying teen pregnancy as a priority health problem in their county; no other problem was cited more often. These counties are:

Avery	Lee	Stanly*
Bertie	Lincoln*	Stokes
Carteret	McDowell	Swain
Caswell	Mitchell	Transylvania
Cumberland	Pender	Vance
Duplin*	Person	Wake
Durham	Polk*	Wayne
Granville	Richmond	Wilson
Hertford	Rowan*	Yancey
Hoke*	Rutherford*	
Iredell	Sampson	

*County reported teen pregnancy as their number one priority.

Nine other counties reported the general category "adolescent health" as a problem of major concern. These counties are: Camden, Chatham, Chowan, Davie, Haywood, Montgomery, Northampton, Pasquotank, and Perquimans. This was Chatham County's top priority. Eight counties reported adolescent drug and alcohol abuse as a major public health problem: Caswell, Chatham, Granville, New Hanover, Richmond, Surry, Wake, and Warren. Richmond County reported this problem as its number one priority.

HEALTHY CAROLINIANS 2000

Keenly aware of North Carolina's unfavorable ranking on many of the national health status indicators, Governor James G. Martin established in August 1991 the Governor's Task Force on Health Objectives for the Year 2000. The deliberations of this 25-member body resulted in the November 1992 publication of North Carolina objectives addressing 11 broad areas of concern. For adolescents and young adults, specific improvement targets were established for motor vehicle fatalities, pregnancy, dental decay, physical fitness, nutrition (obesity), sexually transmitted diseases, and substance abuse (tobacco, marijuana, and alcohol).[32]

The report of the Task Force emphasizes community-based intervention strategies. To date, leaders in 52 of the state's 100 counties have plans to develop responsive health improvement plans for their communities; 21 counties already have active task forces. By the end of 1994, an additional seven counties were expected to have active task forces.

For more information about *Healthy Carolinians 2000*, contact Sarah Ahmad, Project Director, at (919) 715-4173.

SUMMARY

This study of the health status of North Carolina's adolescent population reveals some positive changes over time but a number of disturbing trends and patterns that need attention and action. These findings are highlighted below.

Mortality

- Reductions in unintentional injury deaths have been accompanied by large increases in adolescent homicide and suicide. Hence, external causes of death continue to account for three of every four adolescent deaths in North Carolina.

- Death rates are generally much higher for older adolescents than for younger ones, for minorities than for whites, and for males than for females. Minority male rates are especially high. Major exceptions are the higher suicide and motor vehicle fatality rates among whites aged 15-19.

- At ages 15-19, the homicide rate for minority males is *13 times* the rate for white males.

Violence

- The arrest rate for adolescents rose 45 percent between 1978 and 1992 with rates for several very serious offenses more than doubling. The arrest rate at ages 18-19 now rivals the peak rate at ages 20-24.

- Arrest rates are generally higher for older, male, and minority adolescents.

- Between 1984 and 1992, adolescents became much less likely to be incarcerated in state prisons for misdemeanor crimes but much more likely to be incarcerated for felonious crimes, especially homicide, robbery, drug violations, and burglary/breaking/entering.

- The large decrease in the misdemeanor incarceration rate results from the state's 1987 prison cap law. Due to repeat offenses by early parolees, that law may also explain some of the increase in arrest and felony incarceration rates.

Reproductive Health

- Between 1978 and 1992, the birth rate, abortion rate, and abortion fraction of minority adolescents all rose. The abortion increases were particularly large among minority women aged 18-19.

- For all races combined, the state's 1980 to 1990 increases in adolescent pregnancy, birth, and abortion rates are in contrast to downturns in many other states.

- In 1994, 31 of the state's 100 counties reported adolescent (teen) pregnancy as one of their top five health problems. No other problem was cited more often.

- Following an upward trend, 15 of each 1,000 female population aged 15-17 had a second or higher-order pregnancy in 1992. The rate for minorities was *four times* the rate for whites.

- A rising percentage of births to adolescent mothers represent a second or higher-order pregnancy. The 1992 percentages were 31 for whites and 41 for minorities.

- The most dramatic change in live birth statistics is the rising percentage of adolescent mothers who are unmarried. The increase has been especially great at ages 18-19. Among adolescents giving birth in 1992, more than half of whites and nearly 95 percent of minorities were unwed.

- Among adolescents giving birth in 1992, whites were especially likely to smoke.

- The percentage of adolescent mothers receiving late or no prenatal care has declined but remains high, especially at younger ages and among minorities. In 22 counties, *more than half* of adolescent mothers received late or no care during 1988-92.

- Following recent increases in adolescent use of health department prenatal care, prenatal WIC, and Medicaid newborn care, the percentage of adolescent mothers receiving health department prenatal care declined in 1992, suggesting a shift of Medicaid mothers to care in the private sector.

- Adolescent mothers on Medicaid experienced large increases in maternity care coordination (case management) after the service was first offered in 1988, but many still do not receive the service.

- In 1992, minority adolescents were more likely than whites to use the services cited above.

- Following virtually no improvement in recent years, low birthweight rates remain high among adolescent mothers, especially minorities.

- For adolescent mothers of both races, infant mortality declined nearly 50 percent between 1978 and 1991. The minority rates of fetal and infant mortality remained higher than the white rates, except white mothers aged 15-17 experienced higher postneonatal loss.

- Younger adolescents have experienced increased rates of both syphilis and gonorrhea. Although gonorrhea has declined somewhat at ages 15-19, the state's rate is still far above the national rate.

- Exceedingly high rates of syphilis, gonorrhea, and chlamydia are observed among older, female, and minority adolescents except that

gonorrhea rates for minority males and females aged 15-19 are about equal.

- In 1992, three cases of adolescent AIDS were reported, but many more individuals actually acquire the HIV infection during adolescence.

Use of Health Services

- Childbirth and reproductive complications accounted for 43 percent of adolescent hospitalizations during 1992. Mental disorders and injury/poisoning each accounted for just over ten percent.

- Among public programs that serve adolescents, the following appear to have experienced substantial growth during the recent past: Health Check: Healthy Children and Teens, Area Mental Health Centers, WIC, and Maternal Health.

In addition to the above findings, this report is replete with information about the health-related behaviors of adolescents as measured by the 1993 Youth Risk Behavior Survey of 9th-12th grade students. The various indicators will be tracked over time as the Department of Public Instruction conducts this survey on a biennial basis. This report also reveals a high prevalence of overweight among adolescent clients of health departments and low levels of physical fitness among the state's child and adolescent populations.

CONCLUSION

Health care is more than medical care alone; it includes the prevention and control of disease and injury rather than simply their treatment.[33] How will adolescents fare in the proposed world of *health care reform*? No one knows for sure, but public health must do its part in the areas of prevention and primary care.

In North Carolina, public health is committed to expanding its role in the area of adolescent health. School-based health centers (CAHCPs) and local adolescent pregnancy prevention programs (APPPs) are a reality. We must now measure the outcomes of those efforts, fix what is wrong, and extrapolate the successful experiences to reach adolescents statewide. Otherwise, the negative consequences of unhealthy behaviors developed in adolescence will continue their upward trends.

Results of the biennial Youth Risk Behavior Survey will be most helpful in defining adolescent needs statewide, and the CAHCP surveys will define those needs for local school jurisdictions. But certain data deficiencies remain, most notably (1) lack of data on hospital outpatient and nonhospital health services and (2) failure to collect patient's race and the external cause of injuries in hospital discharge reporting. These data are needed to quantify and describe adolescent morbidity and disability, particularly that associated with violence and abuse. The development and use of these data is crucial to making informed decisions that meet the changing needs of the state's adolescent population. The state's Medical Database Commission is working toward the acquisition of data specified in (1) above, but (2) above remains a data problem of substantial concern. All services reported to the Medical Database Commission should include patient's race and the external cause of injuries in the required dataset.

It is hoped that the legislature will see the need to expand its funding of adolescent health programs. For more information about those mentioned above (CAHCPs and APPPs), the reader should contact the Division of Maternal and Child Health of the Department of Environment, Health, and Natural Resources. Also, grant-funded adolescent parenting programs are operated through the Division of Social Services, Department of Human Resources.

REFERENCES

1. N.C. Department of Human Resources. "Focus .... Teenage Pregnancies, North Carolina 1973-1977," *PHSB Studies*, No. 13. Raleigh, March 1979.

2. N.C. Department of Human Resources. "Teen and Preteen Pregnancies in North Carolina, 1981," *SCHS Studies*, No. 26, Raleigh, May 1983.

3. N.C. Department of Human Resources. "Accidental Death Among Children and Teenagers in North Carolina," *PHSB Studies*, No. 17. Raleigh, December 1979.

4. Surles, Kathryn and Gordon Daughtry. "Death Among North Carolina's Children and Youth," *SCHS Studies*, No. 29. N.C. Department of Human Resources, Raleigh, December 1983.

5. Nelson, M.D. Jr. "North Carolina Child and Adolescent Mortality," *CHES Studies*, No. 53. N.C. Department of Environment, Health, and Natural Resources, Raleigh, July 1990.

6. Bowling, Michael J. "Unintended Childhood Injury in North Carolina," *SCHS Studies*, No. 37. N.C. Department of Human Resources, Raleigh, August 1985.

7. U.S. Department of Health and Human Services, Public Health Service. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, DHHS Publication No. (PHS) 91-50212. U.S. Government Printing Office, Washington, September 1990.

8. N.C. Department of Public Instruction. *1993 Youth Risk Behavior Survey*. Raleigh, March 1993.

9. The Annie E. Casey Foundation. *Kids Count Data Book: State Profiles of Child Well-Being*. Baltimore, Maryland, 1994.

10. N.C. Department of Environment, Health, and Natural Resources. "Health Status of Native Americans in North Carolina," *CHES Studies*, No. 75. Raleigh, August 1993.

11. National Center for Health Statistics. "Advance Report of Final Mortality Statistics, 1991," *Monthly Vital Statistics Report*, Vol. 42, No. 2, Supplement. Hyattsville, Maryland: Public Health Service, August 31, 1993.

12. National Center for Health Statistics. *Healthy People 2000 Review, 1993*. Hyattsville, Maryland: Public Health Service, 1994.

13. "Crime Against U.S. Juveniles Rising Sharply," *The Raleigh (N.C.) News and Observer*, Section A, p. 1A, July 18, 1994.

14. Personal communication with Kenneth L. Parker, N.C. Department of Correction. Raleigh, July 20, 1994.

15. Spitz, Alison M. et al. "Surveillance for Pregnancy and Birth Rates Among Teenagers, by State—United States, 1980 and 1990." In CDC Surveillance Summaries, *Morbidity and Mortality Weekly Report*, Vol. 42, No. SS-6. U.S. Government Printing Office, Washington, December 17, 1993, p.7.

16. The Alan Guttmacher Institute. *Sex and America's Teenagers*. New York, 1994.

17. Surles, Kathryn B., Karen T. Graham, and Delton Atkinson. "Health Status of Blacks in North Carolina," *CHES Studies*, No. 76. N.C. Department of Environment, Health, and Natural Resources, Raleigh, October 1993.

18. Surles, Kathryn B. and Michael J. Symons. "The Measurement of Attributable Risk: A Useful Tool for Health Administrators," *SCHS Statistical Primer*, No. 8. N.C. Department of Human Resources, Raleigh, October 1986.

19. N.C. Department of Human Resources. "The State Abortion Fund Fact Sheet." Raleigh, (undated).

20. N.C. Department of Human Resources, Public Health Statistics Branch. "A Century of Public Health in North Carolina," *North Carolina Medical Journal*, Vol. 38, No. 1. January 1977.

21. Jamieson, Denise J. and Paul A. Buescher. "The Effect of Prior Family Planning Participation on Prenatal Care Use and Low Birth Weight," *CHES Studies*, No. 62. N.C. Department of Environment, Health, and Natural Resources, Raleigh, March 1992.

22. Personal Communication with William Brown, Women's Health Section, N.C. Department of Environment, Health, and Natural Resources. Raleigh, June 28, 1994.

23. Buescher, Paul A., Marcia S. Roth, Dennis Williams, and Carolyn M. Goforth. "An Evaluation of the Impact of Maternity Care Coordination on Medicaid Birth Outcomes in North Carolina," *American Journal of Public Health*, Vol. 81, No. 12. December 1991.

24. Buescher, Paul A., Linnea C. Larson, M.D. Nelson, Jr., and Alice J. Lenihan. "Prenatal WIC Participation Can Reduce Low Birth Weight and Newborn Medical Costs: A Cost-Benefit Analysis of WIC Participation in North Carolina," *Journal of the American Dietetic Association*, Vol. 93, No. 2. February 1993.

25. Centers for Disease Control. "Summary of Notifiable Diseases, United States, 1991," *Morbidity and Mortality Weekly Report*, Vol. 40, No. 53. Atlanta, Georgia: Public Health Service, October 2, 1992.

26. Centers for Disease Control and Prevention. Computer program containing NHANES (1971-1980) age-sex-specific 85th and 95th percentile values. Obtained from Tim Byers, Atlanta, August 1994.

27. Public Health Service. "Health Objectives for the Nation: Prevalence of Overweight Among Adolescents—United States, 1988-91, *Morbidity and Mortality Weekly Report*, Vol. 43, No. 44, U.S. Government Printing Office, Washington, November 11, 1994, pp. 818-821.

28. Davis, Kathryn L. et al. "North Carolina Children and Youth Fitness Study," *Journal of Physical Education, Recreation and Dance*. October 1994.

29. Rozier, R. Gary, George G. Dudney, and C. Jean Spratt. *The 1986-87 North Carolina School Oral Health Survey*. N.C. Department of Environment, Health, and Natural Resources, Division of Dental Health, Raleigh, October 1991.

30. Shuptrine, Sarah C., Vicki C. Grant, and Genny G. McKenzie. *Uninsured Children in the South*. The Southern Institute on Children and Families, Columbia, South Carolina, November 1992.

31. N.C. Department of Environment, Health, and Natural Resources, State Center for Health and Environmental Statistics. *Guide for a Community Diagnosis: A Report for Local Health Departments.* Raleigh, July 1993.

32. *Healthy Carolinians 2000: The Report of the Governor's Task Force on Health Objectives for the Year 2000.* Carrboro, North Carolina, November 18, 1992.

33. Smith, David R. "Porches, Politics, and Public Health." In Public Health Policy Forum, *American Journal of Public Health*, Vol. 84, No. 5. May 1994.

GLOSSARY

Abortion - Induced abortion, or the intentional interruption of pregnancy. Early spontaneous abortions are not reportable in North Carolina.

Abortion Fraction - The number of induced abortions per 1,000 pregnancies (live births plus fetal deaths plus abortions).

Abortion Rate - The number of induced abortions per 1,000 females in the population.

Adolescent - For this report, a person aged 10 through 19 years.

Age-Specific Rates - Events in the age group per 1,000 or 100,000 population in the age group. Events may be births, abortions, pregnancies, deaths, diseases, arrests, etc.

APPP - Adolescent Pregnancy Prevention Program.

Arrest Rate - Arrests per 1,000 or per 100,000 population.

Birth Defect - Any abnormal condition present at birth, not including injuries caused by the delivery. These are ICD-9 codes 740-759.

Birth Order - The sum of previous children now living, previous children born alive and now dead, and previous fetal deaths (any gestational age) plus one for the present birth. Previous induced abortions may be included, effective with the 1988 revised birth certificate.

Birth Rate - The number of live births per 1,000 females in the population.

Block Numbering Area (BNA) - Small statistical subdivisions of a county for grouping and numbering blocks in nonmetropolitan counties where local census statistical areas committees have not established census tracts. State agencies and the Census Bureau delineated BNAs for the 1990 census, using guidelines similar to those for the delineation of census tracts (see definition). BNAs do not cross county boundaries.

CAHCP - Comprehensive Adolescent Health Care Project.

Causes of Death - All diseases, morbid conditions, or injuries that either resulted in or contributed to death and in the case of injuries, the circumstances of the injury or violence. In this report, deaths are tabulated by underlying cause of death (see definition).

Census Tract - Small, relatively permanent statistical subdivisions of a county. They are delineated for all metropolitan areas and other densely populated counties by local census statistical areas committees following Census Bureau guidelines.

Census tracts usually have between 2,500 and 8,000 persons and, when first delineated, are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. Census tracts do not cross county boundaries. The spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are delineated with the intention of

being maintained over a long time so that statistical comparisons can be made from census to census. However, physical changes in street patterns caused by highway construction, new development, etc., may require occasional revisions; census tracts occasionally are split due to large population growth, or combined as a result of substantial population decline.

Note: Figure 1 of this report depicts for race-sex groups the numbers of adolescents (ages 10-19) living in census tracts (metropolitan counties) and block numbering areas (nonmetropolitan counties). Data are from the U.S. Census 1990.

Death - The permanent disappearance of any evidence of life at any time after live birth. N.C. law (G.S. 90-322) also defines criteria for certifying "brain death."

Deliveries - The total number of live births plus fetal deaths of 20 or more weeks gestation.

DUI - Driving under the influence.

DWI - Driving while impaired.

Fetal Death - Death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, as indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles (definition adopted by World Health Organization in 1950). Consistent with North Carolina law, this report includes only fetal deaths that do not qualify as therapeutic abortions and which result from pregnancies of 20 or more weeks gestation.

Felony - A serious crime such as murder, rape, or burglary.

Fetal Death Rate - Fetal deaths per 1,000 deliveries (live births plus fetal deaths).

Incarceration Rate - State prison inmates per 100,000 population.

ICD: International Classification of Diseases - A numerical system used worldwide for classifying <u>all</u> causes of death. The Ninth Revision was first applied to 1979 deaths.

Infant Death - Death of a liveborn child under one year of age. Infant deaths are the sum of neonatal and postneonatal deaths (see definitions).

Infant Death Rate - The number of infant deaths per 1,000 live births.

Late or No Prenatal Care - No care during the first trimester (three months) of pregnancy.

Live Birth - The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or any definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached (definition adopted by World Health Organization in 1950).

Low Birthweight - 2500 grams (5 pounds, 8 ounces) or less at birth, regardless of the period of gestation (World Health Organization 1950).

Maternity Care Coordination - A formal case management process with a primary focus on the organization of services and resources to respond to the health care needs of a pregnant woman who has been determined to be eligible for Medicaid.

Medicaid - A public assistance program that pays for the medical care of people who are eligible for cash assistance payments or who have medical needs greater than their resources. The largest share of Medicaid costs is paid by the federal government.

Misdemeanor - An offense of lesser gravity than a felony, punishable by imprisonment for no more than two years.

Neonatal Death - Death of a liveborn child under 28 days of age.

Neonatal Death Rate - Neonatal deaths per 1,000 live births.

Postneonatal Death - Death of an infant 28 days and over but less than one year of age.

Postneonatal Death Rate - Postneonatal deaths per 1,000 neonatal survivors (live births minus neonatal deaths).

Pregnancies - The total number of live births plus fetal deaths of 20 or more weeks gestation plus induced abortions.

Pregnancy Rate - The number of pregnancies per 1,000 females in the population.

Race - As used by the Census Bureau, race reflects self-identification; it does not denote any clear-cut biological definition.

White--Includes persons who indicate their race as white (Caucasian) or report entries such as Canadian, German, Italian, Lebanese, Near Easterner, Arab, or Polish.

Nonwhite or Minority--Race other than white. Blacks account for about 90 percent of the state's nonwhite or minority population.

Repeat Pregnancy - A second or higher-order pregnancy resulting in live birth, fetal death, or induced abortion.

Residence - The place (county, state, etc.) in which a person resides at the time of an event. College students and military personnel are considered residents of the college or military community. For deaths of inmates of long-term institutions, the institution is considered the residence if the decedent has resided there at least one year. For births, residence is that of the mother.

Underlying Cause of Death - (a) The disease or injury that initiated the chain of morbid events leading to death, or (b) the circumstances of the injury or violence that produced the fatal injury.

Unmarried (Unwed) Mother - At time of giving birth, woman has never been legally married or has been widowed or legally divorced from her husband in excess of 280 days.

Violent Deaths - Deaths due to homicide, suicide, motor vehicle and other injuries, and legal intervention.

WIC - The Special Supplemental Food Program for Women, Infants, and Children. This nationwide program, funded by the U.S. Department of Agriculture, provides nutrition education for low-income women and children and vouchers for the purchase of specific supplemental foods and infant formula. Eligible persons include pregnant/breast-feeding/postpartum women, infants, and children up to age 5 who are at medical or nutritional risk.

Youth Risk Behavior Survey (YRBS) - A biennial survey of 9th-12th grade students conducted by the N.C. Department of Public Instruction in collaboration with the Centers for Disease Control. In 1993, 71 N.C. schools were selected as survey sites from a base of 407 public schools containing approximately 300,000 students in grades 9-12. Fifty-nine schools and 2,531 students participated in the survey. In all, 2,439 students completed usable surveys. The survey instrument is Appendix 2 of this report.

TABLES

Table 1

Adolescent Population Counts by Age, Race, and Hispanic Origin with Percent Changes Since 1980 North Carolina 1990

Age	Total	Whites	Blacks	American Indians*	Hispanic Origin**
10-14	436,840	298,640	124,437	7,665	5,319
15-17	270,733	185,896	76,430	4,779	2,900
18-19	227,097	160,741	59,204	3,330	3,588
Total 10-19	934,670	645,277	260,071	15,774	11,807
1980-1990 Percent Change	-10.9	-12.9	-9.2	+10.7	+2.2

*Includes a small number of Eskimos and Aleuts.
**Persons of Hispanic origin may be of any race.

Table 2

Sociodemographic Indicators for Adolescents by Race
North Carolina 1990

	Total	White	Minority
Demographics			
Persons 10-19:			
Percent males	51.2	51.6	50.4
Males per 100 females	104.8	106.3	101.5
Percent rural	51.0	55.9	40.1
Economics			
Persons 12-17:			
Percent below poverty 1989	15.3	8.2	30.2
Education			
Persons 10-17:			
Percent not enrolled in school	6.0	5.7	6.7
Persons 16-19:			
Percent civilian, not in school, not high school graduate	12.4	12.2	12.7
Employment			
Males 16-19:			
Percent in labor force	54.8	58.7	45.5
Females 16-19:			
Percent in labor force	49.0	52.4	41.4
Males 16-19 in civilian labor force:			
Percent unemployed	14.9	11.6	25.3
Females 16-19 in civilian labor force:			
Percent unemployed	16.0	12.2	26.8
Family Structure			
Own Children 12-17 in Families:			
Percent in married-couple family	75.6	NA	NA
Percent in male-householder family (no spouse present)	3.5	NA	NA
Percent in female-householder family (no spouse present)	20.9	NA	NA
Marital Status			
Females 15-17:			
Percent married and not separated	2.2	2.7	0.9
Females 18-19:			
Percent married and not separated	10.9	13.3	5.2

Source of Data: Published census materials and computer printouts.
NA-Not Available.

Table 3

Adolescent Population Counts by Age, Race, and Sex
North Carolina 1992

	Total		Whites		Minorities	
Age	Males	Females	Males	Females	Males	Females
10-14	223,587	214,744	156,338	148,146	67,249	66,598
15-17	133,580	128,889	93,930	88,463	39,650	40,426
18-19	109,763	105,086	79,765	74,690	29,998	30,396
Total 10-19	466,930	448,719	330,033	311,299	136,897	137,420

Table 4
Adolescent Population Counts by Race, Age, and Sex
North Carolina and Counties 1992

	WHITES						MINORITIES					
	10-14		15-17		18-19		10-14		15-17		18-19	
RESIDENCE	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
North Carolina	156,338	148,146	93,930	88,463	79,765	74,690	67,249	66,598	39,650	40,426	29,998	30,396
COUNTY												
Alamance	2,488	2,325	1,446	1,329	1,434	1,445	730	743	439	490	317	336
Alexander	903	860	570	503	406	351	78	59	50	47	32	22
Alleghany	313	273	187	155	119	114	6	6	5	6	4	1
Anson	380	338	247	220	156	148	501	525	284	316	173	190
Ashe	695	659	453	409	279	254	6	4	5	3	4	4
Avery	464	463	281	280	392	309	8	3	6	6	36	10
Beaufort	945	891	581	516	381	378	617	592	342	379	205	229
Bertie	246	216	147	132	86	73	553	612	325	322	173	209
Bladen	519	547	361	310	228	214	537	521	308	298	177	192
Brunswick	1,275	1,186	753	729	516	512	437	419	257	250	165	151
Buncombe	4,829	4,658	2,958	2,761	1,936	1,985	642	604	415	394	239	215
Burke	2,191	2,009	1,430	1,363	938	830	247	246	328	151	212	95
Cabarrus	2,842	2,667	1,692	1,564	1,125	1,079	591	561	372	374	252	255
Caldwell	2,075	2,003	1,358	1,285	915	868	172	154	91	101	62	65
Camden	155	122	95	77	56	49	56	52	34	28	24	19
Carteret	1,502	1,417	922	832	655	551	247	233	129	132	84	94
Caswell	383	367	235	207	168	137	290	297	182	192	129	114
Catawba	3,425	3,255	2,152	2,082	1,496	1,469	521	479	334	325	223	228
Chatham	895	774	458	439	361	312	348	322	206	197	130	115
Cherokee	609	652	376	371	256	261	27	24	19	20	15	11
Chowan	260	262	147	142	98	102	254	240	121	118	74	71
Clay	248	219	143	139	89	72	3	2	2	0	0	0
Cleveland	2,074	1,981	1,284	1,237	927	869	756	735	498	471	312	294
Columbus	1,152	1,089	657	656	451	432	827	779	417	475	247	282
Craven	1,925	1,930	1,108	1,120	984	779	1,024	949	587	601	332	397

Table 4 (continued)
Adolescent Population Counts by Race, Age, and Sex
North Carolina and Counties 1992

RESIDENCE COUNTY	WHITES						MINORITIES					
	10-14		15-17		18-19		10-14		15-17		18-19	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Cumberland	5,776	5,543	3,278	3,116	4,783	2,465	4,362	4,406	2,448	2,528	2,393	1,762
Currituck	449	417	227	230	155	140	67	73	45	37	30	22
Dare	662	640	369	343	235	232	36	41	27	13	16	14
Davidson	3,752	3,478	2,316	2,129	1,573	1,497	551	542	339	354	220	232
Davie	852	790	537	459	356	344	105	86	49	65	43	42
Duplin	898	864	581	481	362	350	586	596	336	348	208	225
Durham	2,903	2,778	1,719	1,601	1,986	1,763	2,616	2,621	1,534	1,572	1,383	1,801
Edgecombe	731	683	439	426	314	304	1,452	1,439	831	861	499	537
Forsyth	5,611	5,403	3,343	3,242	2,454	2,503	2,626	2,605	1,673	1,750	1,122	1,187
Franklin	806	708	457	437	495	397	552	522	324	312	210	225
Gaston	4,819	4,598	3,046	2,883	2,108	2,066	1,069	1,002	636	631	378	409
Gates	184	151	97	79	58	59	158	175	92	80	59	58
Graham	222	201	143	125	92	80	25	22	15	16	12	8
Granville	714	702	426	424	274	269	562	535	344	326	246	241
Greene	305	257	172	138	111	92	282	308	178	174	123	112
Guilford	7,066	6,545	4,276	3,890	3,523	4,281	3,648	3,507	2,131	2,190	2,191	2,857
Halifax	796	715	448	433	314	294	1,402	1,387	751	785	456	465
Harnett	1,669	1,651	983	982	842	1,055	692	677	423	432	263	290
Haywood	1,328	1,235	809	775	561	517	30	35	20	24	15	15
Henderson	2,002	1,822	1,154	1,063	740	714	148	135	70	65	54	52
Hertford	262	249	146	145	208	168	588	616	317	351	229	199
Hoke	321	300	204	162	152	128	664	633	417	375	312	238
Hyde	130	109	70	64	56	39	76	62	43	37	27	27
Iredell	2,452	2,356	1,522	1,429	1,006	1,005	653	645	422	393	271	273
Jackson	648	599	388	394	923	956	160	143	88	82	80	80

Table 4 (continued)
Adolescent Population Counts by Race, Age, and Sex
North Carolina and Counties 1992

	WHITES						MINORITIES					
	10-14		15-17		18-19		10-14		15-17		18-19	
RESIDENCE COUNTY	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Johnston	2,228	2,070	1,392	1,256	958	920	626	660	372	396	235	257
Jones	186	172	98	108	60	78	143	153	78	89	52	56
Lee	1,081	1,050	591	586	398	402	462	478	266	277	169	165
Lenoir	1,064	995	647	583	458	399	1,072	1,018	611	665	356	413
Lincoln	1,512	1,467	941	933	646	600	188	210	116	118	71	84
McDowell	1,136	972	753	702	481	439	59	70	41	34	28	31
Macon	662	635	410	356	224	225	13	22	52	13	56	11
Madison	546	489	350	291	314	345	4	3	2	4	29	4
Martin	430	450	274	236	168	173	476	492	288	294	186	179
Mecklenburg	10,842	10,416	6,360	6,234	4,855	5,023	6,233	6,337	3,626	3,866	2,420	2,785
Mitchell	450	428	260	227	154	162	1	2	1	1	0	0
Montgomery	573	491	346	297	254	191	296	278	212	199	126	107
Moore	1,408	1,357	819	743	528	553	544	502	276	275	181	170
Nash	1,690	1,636	1,030	997	688	657	1,043	1,087	597	657	417	446
New Hanover	2,814	2,796	1,791	1,670	1,848	2,022	1,106	1,081	644	681	419	475
Northampton	217	195	143	120	91	75	524	508	265	288	193	166
Onslow	3,180	3,040	1,698	1,559	4,750	1,613	1,160	1,133	578	605	1,485	432
Orange	1,975	1,945	1,102	1,123	2,254	2,913	633	558	326	312	475	662
Pamlico	239	238	139	144	99	94	118	137	58	65	36	42
Pasquotank	681	645	382	373	225	237	544	520	271	285	247	292
Pender	640	572	399	359	291	249	415	361	225	193	120	117
Perquimans	217	222	121	123	75	80	158	137	74	82	38	43
Person	641	636	398	385	256	269	343	318	218	213	148	153
Pitt	2,077	1,927	1,219	1,099	2,044	2,250	1,608	1,728	991	1,052	747	692
Polk	370	330	203	194	118	131	48	34	40	24	21	13

Table 4 (continued)
Adolescent Population Counts by Race, Age, and Sex
North Carolina and Counties 1992

RESIDENCE COUNTY	WHITES						MINORITIES					
	10-14		15-17		18-19		10-14		15-17		18-19	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Randolph	3,246	3,139	1,948	1,871	1,300	1,309	263	271	161	152	106	98
Richmond	985	914	679	620	440	404	683	647	440	390	263	227
Robeson	1,163	1,123	795	692	525	489	3,287	3,301	1,981	1,994	1,233	1,328
Rockingham	2,096	1,952	1,270	1,166	824	838	664	652	419	441	296	302
Rowan	2,940	2,814	1,736	1,683	1,194	1,091	712	795	419	473	423	355
Rutherford	1,667	1,553	1,049	972	709	626	301	260	187	194	109	120
Sampson	1,016	990	655	598	430	369	750	790	450	466	247	291
Scotland	664	630	436	381	332	383	724	730	420	494	271	272
Stanly	1,457	1,442	879	880	625	598	301	270	169	172	106	115
Stokes	1,192	1,107	729	681	505	494	88	80	54	48	38	36
Surry	1,911	1,723	1,142	1,185	835	764	114	126	54	59	53	40
Swain	264	195	158	126	98	83	169	154	139	76	117	44
Transylvania	785	668	484	401	469	417	62	50	84	31	74	55
Tyrrell	79	85	40	52	29	21	79	74	41	39	19	27
Union	2,545	2,545	1,542	1,471	1,040	1,010	673	650	402	424	257	264
Vance	649	610	394	391	262	289	745	739	466	476	301	299
Wake	10,330	9,859	5,806	5,739	5,268	5,416	3,671	3,707	2,104	2,171	1,978	2,290
Warren	203	160	114	91	59	54	437	389	256	270	154	159
Washington	207	239	134	129	89	99	308	310	187	165	98	108
Watauga	924	852	543	505	1,479	1,801	14	11	11	10	91	97
Wayne	2,306	2,131	1,421	1,206	953	878	1,491	1,473	873	895	568	582
Wilkes	1,918	1,718	1,239	1,070	812	743	113	127	76	66	46	61
Wilson	1,387	1,247	797	768	534	533	1,146	1,146	691	701	406	445
Yadkin	920	878	582	508	379	377	40	40	25	29	27	16
Yancey	474	441	301	271	205	193	9	5	4	5	1	0

Table 5

Adolescent Death Rates* by Race-Sex and Age
North Carolina 1992 and United States 1991

	Ages 10-14		Ages 15-19	
Race-Sex	N.C.	U.S.**	N.C.	U.S.**
White Male	29.4	30.6	100.8	112.2
White Female	19.6	17.5	49.6	46.9
Minority Male	56.5	42.3	173.7	194.6
Minority Female	27.0	21.3	50.8	48.8

*Deaths per 100,000 population.

**Source is Reference 11. Provisional U.S. data for 1992 are available for ages 5-14 and 15-24 but not 10-14 and 15-19.

Table 6

Adolescent Deaths and Death Rates for Leading Causes by Age and Race-Sex
North Carolina 1990-92

Age and Underlying Cause of Death	Total		White Males		White Females		Minority Males		Minority Females	
	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]
AGES 10-14										
All Causes	386	29.4	146	31.3	87	19.7	102	50.5	51	25.2
Unintentional Injury[2,3]	173	13.2	68	14.6	37	8.4	52	25.5	16	7.9
Motor Vehicle[2]	100	7.6	35	7.5	33	7.5	22	10.8	10	4.9
Other[3] 73	5.6	33	7.1	4	0.9	30	14.7	6	3.0	
Homicide[4]	29	2.2	4	0.9	5	1.1	12	5.9	8	4.0
Suicide[5]	23	1.7	14	3.0	4	0.9	5	2.4	0	0.0
Cancer[6] 44	3.3	23	4.9	8	1.8	8	3.9	5	2.5	
Heart Disease[7]	13	1.0	5	1.1	3	0.7	2	1.0	3	1.5
AGES 15-19										
All Causes	1,280	87.4	589	110.6	231	46.4	350	161.4	110	50.6
Unintentional Injury[2,3]	660	45.1	342	64.2	154	30.9	132	60.9	32	14.7
Motor Vehicle[2]	516	35.2	274	51.5	135	27.1	82	37.8	25	11.5
Other[3] 144	9.8	68	12.8	19	3.8	50	23.1	7	3.2	
Homicide[4]	220	15.0	29	5.4	17	3.4	149	68.7	25	11.5
Suicide[5]	150	10.2	110	20.7	12	2.4	25	11.5	3	1.4
Cancer[6] 50	3.4	22	4.1	9	1.8	10	4.6	9	4.1	
Heart Disease[7]	30	2.0	15	2.8	1	0.2	11	5.1	3	1.4

[1]Deaths per 100,000 population.
[2]ICD-9 Codes 810-825.
[3]ICD-9 Codes 800-807, 826-949.
[4]ICD-9 Codes 960-978.
[5]ICD-9 Codes 950-959.
[6]ICD-9 Codes 140-208.
[7]ICD-9 Codes 390-398, 402, 404-429.

Table 7

Arrests and Arrest Rates with Percent Changes Since 1978 by Age
North Carolina 1992

	Arrests		Percent Changes	
Ages 10 and over	Number	Rate*	Number	Rate
TOTAL	486,644	82.8	43.4	19.0
10-17	41,730	59.5	32.2	52.8
18-19	37,889	176.4	21.7	34.9
20-24	103,668	181.3	29.2	26.8
25-29	90,697	163.3	62.2	39.0
30-34	79,592	138.1	103.3	52.5
35-39	56,707	103.2	102.0	30.3
40-44	34,171	67.8	56.1	-3.5
45-49	18,489	42.7	4.7	-28.2
50-54	9,993	29.3	-30.9	-39.8
55-59	6,003	20.0	-38.4	-41.4
60-64	3,662	12.6	-33.8	-44.0
65+	4,043	4.8	0.9	-31.7

*Arrests per 1,000 population.

Source of Arrest Counts: State Bureau of Investigation.

Table 8

Adolescent Arrest Rates* by Type of Offense, Age-Sex, and Age-Race
North Carolina 1992

Offense Category	Ages 10-17 Males	Ages 10-17 Females	Ages 18-19 Males	Ages 18-19 Females	Ages 10-17 Whites	Ages 10-17 Minorities
PART 1						
Murder	24.4	2.0	75.6	4.8	3.5	36.0
Manslaughter by Negligence	0.8	0.3	2.7	0.0	0.4	0.9
Forcible Rape	25.5	0.0	55.6	0.0	5.5	29.9
Robbery	137.8	3.5	429.1	14.3	12.9	206.1
Aggravated Assault	488.8	100.1	1,341.1	261.7	129.2	683.0
Burglary, B & E	992.8	76.0	1,946.0	130.4	423.5	815.7
Larceny	1,716.0	627.4	2,622.9	1,044.9	774.3	2,110.6
Motor Vehicle Theft	182.0	27.1	256.9	18.1	61.4	207.6
Arson	50.1	10.2	44.6	4.8	23.4	46.7
Subtotal - Part 1	**3,618.2**	**846.5**	**6,774.6**	**1,478.8**	**1,434.2**	**4,136.5**
PART 2						
Simple Assault	940.7	270.3	2,335.0	610.9	276.0	1,376.7
Forgery/Counterfeiting	31.6	24.2	242.3	153.2	23.2	38.8
Fraud	77.8	66.9	752.5	855.5	60.2	100.5
Embezzlement	14.8	13.4	69.2	80.9	12.1	18.7
Stolen Property	264.3	25.3	630.4	71.4	62.6	339.4
Vandalism	608.7	71.6	768.0	154.2	283.6	485.7
Weapons	282.2	27.4	822.7	33.3	73.3	348.3
Prostitution	5.9	5.2	21.9	20.0	4.1	8.9
Sex Offenses	62.2	4.1	119.3	4.8	24.2	55.2
Drug Sales	164.1	11.6	683.3	78.0	20.3	246.4
Drug Possession	365.4	35.5	1,749.2	198.0	107.2	423.0
Gambling	2.5	0.3	10.0	5.7	0.0	4.7
Offenses Against Family	15.4	2.3	185.9	24.7	6.2	15.4
DWI	225.4	34.3	2,138.2	295.9	157.1	73.9
Liquor Laws	358.4	80.0	2,351.4	437.7	261.1	132.8
Disorderly Conduct	373.5	126.6	907.4	176.0	119.5	554.9
Vagrancy	5.0	0.9	9.1	1.9	2.7	3.7
Curfews-Loitering	19.3	3.8	0.0	0.0	3.5	30.4
Runaways	157.9	174.3	0.0	0.0	111.9	288.9
All Other Arrests	1,838.1	472.6	7,734.8	1,604.4	766.1	2,084.4
Subtotal - Part 2	**5,813.2**	**1,450.7**	**21,530.9**	**5,246.2**	**2,375.1**	**6,630.4**
GRAND TOTAL	**9,431.4**	**2,297.2**	**28,305.5**	**6,285.3**	**3,809.4**	**10,767.0**

*Arrests per 100,000 population.

Source of Arrest Counts: State Bureau of Investigation. Race-specific counts were not available for ages 18-19.

Table 9

Adolescent Incarceration Rates* and Percent Changes Since 1984 by Type of Crime and Age North Carolina 1992

Crime Category	Ages 16-17 1992	Ages 16-17 Percent Change	Ages 18-19 1992	Ages 18-19 Percent Change
Total Crimes	198.9	25.3	581.3	55.5
Misdemeanors	15.5	-73.4	25.6	-74.8
Felonies	174.2	78.9	552.9	105.7
• Assaultive	81.4	226.9	238.3	164.5
Homicide	22.9	332.1	58.2	280.4
Rape and Simple Assault	9.2	8.2	30.7	59.9
Robbery	33.2	249.5	108.9	142.0
• Public Order	26.4	**	98.2	1,302.9
Drugs	25.2	**	95.9	1,472.1
• Property	66.5	8.3	216.4	26.0
Burglary, Breaking and Entering	46.4	-8.7	129.9	14.8
Larceny and Auto Theft	17.2	1.8	75.4	81.7

*Prison inmates per 100,000 population. Counts are as of December 31, 1992.
**Rate was zero on December 31, 1984.

Source of Inmate Counts: North Carolina Department of Correction.

Table 10

Adolescent Pregnancy Rates, Birth Rates, Abortion Rates, and Abortion Fractions with Percent Changes Since 1978 by Age and Race North Carolina 1992

Age and Race	Pregnancy Rate* 1992	Pregnancy Rate* Percent Change	Birth Rate* 1992	Birth Rate* Percent Change	Abortion Rate* 1992	Abortion Rate* Percent Change	Abortion Fraction** 1992	Abortion Fraction** Percent Change
10-14								
Total	3.3	-2.9	1.7	+6.3	1.6	-11.1	465.2	-10.7
White	1.5	-11.8	0.6	0.0	0.9	-10.0	626.1	+0.2
Minority	7.3	0.0	4.3	+13.2	2.8	-17.6	391.3	-15.7
15-17								
Total	67.4	+1.8	44.6	+4.9	22.3	-3.9	326.7	-6.7
White	48.4	-5.8	30.2	+1.7	18.0	-15.9	371.2	-10.7
Minority	107.8	+8.3	76.1	+5.3	30.5	+16.9	282.8	+7.7
18-19								
Total	136.2	+2.4	94.2	+4.2	41.0	-1.0	297.8	-4.3
White	107.7	-6.8	74.3	-0.9	32.7	-18.0	303.7	-12.0
Minority	203.9	+17.3	142.9	+10.9	59.2	+39.3	290.1	+18.6
Total 10-19								
Total	52.8	+2.3	35.7	+5.0	16.7	-2.9	313.4	-5.9
White	40.3	-5.6	26.7	+1.1	13.4	-16.8	332.4	-11.7
Minority	80.3	+12.0	56.1	+8.1	23.4	+23.8	291.7	+10.9

*Number of events per 1,000 females 15-44. Pregnancies are the sum of live births, fetal deaths, and abortions.
**Number of induced abortions per 1,000 pregnancies.

Table 11
Live Birth, Abortion, and Pregnancy Rates for Females 15-17 by Race
North Carolina and Counties 1988-92

	Birth Rate*			Abortion Rate*			Pregnancy Rate*		
RESIDENCE	**Total**	**White**	**Minority**	**Total**	**White**	**Minority**	**Total**	**White**	**Minority**
North Carolina	44.3	30.1	75.7	26.9	22.7	34.6	71.7	53.1	111.4
COUNTY									
Alamance	39.7	27.9	73.6	37.4	31.5	49.1	77.9	59.7	125.0
Alexander	27.2	27.2	26.9	9.4	8.7	17.9	36.6	35.9	44.8
Alleghany	16.4	17.0	0.0	19.9	20.6	0.0	36.3	37.6	0.0
Anson	58.4	29.4	77.4	24.3	22.7	24.3	83.1	52.1	102.3
Ashe	29.1	28.4	105.3	15.9	14.2	157.9	45.0	42.6	263.2
Avery	39.5	40.1	0.0	16.4	15.9	50.0	57.9	58.1	50.0
Beaufort	53.4	27.4	89.4	22.4	17.2	28.4	76.2	44.6	118.8
Bertie	47.5	24.0	56.6	15.4	10.5	17.3	63.4	35.9	73.9
Bladen	44.7	26.5	63.0	17.2	17.1	17.2	63.3	43.6	83.2
Brunswick	50.7	44.4	66.3	22.2	22.7	20.7	73.6	68.2	87.0
Buncombe	38.1	30.7	91.2	32.8	29.0	57.8	71.5	60.2	150.5
Burke	43.2	41.1	64.7	18.6	17.0	31.7	61.9	58.3	96.4
Cabarrus	40.2	28.9	93.1	23.5	22.9	26.3	63.8	51.8	120.0
Caldwell	54.0	49.6	107.0	19.9	18.9	26.3	74.7	69.1	136.8
Camden	38.4	40.4	32.9	20.9	21.4	19.7	59.3	61.8	52.6
Carteret	37.9	36.1	49.2	23.7	24.1	20.6	61.7	60.5	69.8
Caswell	23.9	21.8	25.9	19.9	12.2	25.9	44.2	34.1	52.8
Catawba	42.9	34.9	95.4	24.6	21.5	43.1	68.1	56.9	140.3
Chatham	38.2	27.6	62.1	27.7	22.0	36.9	66.5	50.0	99.9
Cherokee	46.0	47.2	20.6	13.9	13.6	20.6	59.9	60.8	41.2
Chowan	40.7	22.3	63.0	17.2	19.6	14.2	57.9	41.9	77.2
Clay	26.7	26.8	0.0	7.6	7.7	0.0	35.6	35.8	0.0
Cleveland	66.2	44.4	123.0	21.8	20.8	24.0	88.8	65.2	149.8
Columbus	49.7	33.3	72.7	18.3	15.4	21.2	68.4	49.2	94.2
Craven	46.0	31.3	73.5	23.6	21.9	26.0	69.7	53.2	99.8
Cumberland	47.6	33.0	66.2	30.2	24.1	37.4	78.2	57.5	104.1
Currituck	31.3	27.4	50.5	18.3	19.2	13.8	49.6	46.7	64.2
Dare	15.4	11.6	89.9	21.5	20.3	33.7	37.4	32.4	123.6
Davidson	42.5	38.1	69.2	26.9	23.8	40.8	70.4	62.5	113.2
Davie	33.7	27.3	79.3	23.2	20.5	42.5	57.6	48.6	121.8
Duplin	48.6	39.6	60.9	28.2	20.2	38.8	77.0	60.2	99.8
Durham	46.3	14.2	79.7	47.1	28.8	64.9	93.8	43.0	145.4
Edgecombe	64.9	34.9	80.7	31.1	34.5	28.6	96.6	69.9	110.0
Forsyth	42.0	22.0	79.6	37.2	27.8	53.8	79.5	49.9	134.2
Franklin	43.8	19.5	75.0	22.6	16.7	30.1	67.7	37.7	106.4
Gaston	56.8	49.3	91.7	22.3	21.3	25.2	79.4	70.9	117.9
Gates	26.4	14.2	36.9	15.4	11.8	18.4	41.8	26.1	55.3
Graham	49.9	48.2	67.8	8.5	7.8	16.9	58.4	56.0	84.7
Granville	40.9	21.3	62.8	33.5	32.7	33.8	74.4	54.0	96.6
Greene	41.0	18.5	58.7	22.1	15.7	26.0	63.6	35.7	84.7
Guilford	41.7	22.4	77.0	39.3	30.9	47.8	81.5	53.4	126.1
Halifax	55.3	31.2	69.4	28.1	32.4	25.1	84.1	64.4	95.2
Harnett	51.7	33.9	89.5	26.2	22.2	34.0	78.3	56.3	124.4
Haywood	44.4	44.7	33.9	20.5	19.2	67.8	65.1	64.1	101.7
Henderson	38.2	35.1	85.6	23.0	21.5	47.0	61.7	57.1	132.6
Hertford	55.3	25.5	68.4	23.5	23.1	23.7	79.5	48.7	93.2
Hoke	70.1	41.1	83.4	18.1	25.9	14.0	88.2	67.0	97.4
Hyde	41.6	11.9	83.0	27.7	23.8	33.2	69.3	35.7	116.2
Iredell	47.5	34.8	93.2	22.2	18.5	34.6	70.3	54.0	128.3

*Number of events per 1,000 females 15-17. Pregnancies are the sum of live births, fetal deaths, and abortions. Numbers underlying the rates are given in Table 12.

Table 11 (continued)
Live Birth, Abortion, and Pregnancy Rates for Females 15-17 by Race
North Carolina and Counties 1988-92

RESIDENCE COUNTY	Birth Rate*			Abortion Rate*			Pregnancy Rate*		
	Total	White	Minority	Total	White	Minority	Total	White	Minority
Jackson	36.8	30.4	69.0	23.3	21.1	34.5	60.6	52.0	103.4
Jonhston	45.0	30.3	90.4	25.4	23.3	30.9	71.1	54.2	122.3
Jones	39.9	23.0	57.4	22.4	13.4	31.7	63.3	38.3	89.1
Lee	53.8	33.5	99.9	27.0	21.3	37.7	81.0	54.8	138.4
Lenoir	52.9	27.7	76.8	26.2	28.3	23.0	80.0	56.6	101.0
Lincoln	49.5	43.6	92.8	20.6	19.7	27.2	70.8	63.8	121.6
McDowell	44.6	42.2	84.1	24.4	25.1	13.3	69.0	67.3	97.3
Macon	27.3	28.1	11.4	18.0	17.8	22.7	46.4	47.0	34.1
Madison	28.0	27.6	55.6	17.8	18.0	0.0	46.4	46.3	55.6
Martin	49.1	19.5	71.0	17.3	15.4	18.7	67.4	34.9	91.5
Mecklenburg	44.8	19.0	86.7	34.8	27.8	45.8	80.1	46.9	133.6
Mitchell	44.0	44.1	0.0	13.6	12.8	500.0	57.6	56.9	500.0
Montgomery	66.7	51.4	92.9	25.9	26.6	24.6	92.9	78.7	117.5
Moore	44.5	30.0	82.1	25.3	22.6	31.7	70.6	53.2	115.2
Nash	41.1	22.6	69.7	20.4	16.8	23.9	62.1	39.8	94.5
New Hanover	43.4	22.9	95.9	31.8	27.9	41.4	75.6	50.9	138.3
Northampton	59.3	33.9	69.7	31.5	24.2	33.8	91.7	58.2	104.8
Onslow	45.8	41.2	58.8	28.1	25.9	33.9	74.0	67.1	92.7
Orange	20.9	11.4	54.2	34.9	26.2	59.3	56.0	37.6	114.1
Pamlico	42.9	28.6	73.7	22.4	16.3	35.4	65.2	45.0	109.1
Pasquotank	41.7	32.1	54.4	19.9	20.9	17.9	63.2	54.1	74.6
Pender	40.2	24.0	67.9	25.4	21.8	31.6	66.0	46.4	99.5
Perquimans	44.1	18.2	81.9	2.0	3.3	0.0	46.0	21.5	81.9
Person	31.5	21.3	51.4	36.3	30.0	44.9	68.2	51.2	97.2
Pitt	48.4	19.9	78.5	19.6	18.5	19.9	68.9	38.6	100.0
Polk	34.2	34.3	33.3	23.7	21.2	40.0	58.8	56.6	73.3
Randolph	39.0	37.1	60.5	25.0	22.2	45.3	64.4	59.8	107.0
Richmond	54.8	41.2	77.3	22.3	21.8	22.6	77.5	63.0	101.0
Robeson	59.5	37.2	67.3	18.8	22.9	17.4	78.7	60.4	85.1
Rockingham	47.6	38.3	71.9	28.4	23.2	37.4	76.8	61.7	111.8
Rowan	46.3	34.3	88.3	23.3	19.8	35.4	70.0	54.3	124.6
Rutherford	51.0	46.5	72.1	18.5	18.2	19.0	70.2	65.4	92.0
Sampson	47.1	38.0	58.5	21.2	16.9	25.3	68.8	54.9	85.0
Scotland	70.3	46.9	89.0	14.3	18.2	11.3	86.2	65.1	103.1
Stanly	46.9	37.5	96.2	21.7	19.3	34.0	69.7	57.2	135.0
Stokes	25.1	24.7	31.0	19.8	19.5	20.7	45.7	44.7	55.2
Surry	37.7	35.7	75.0	17.0	16.7	21.9	54.9	52.7	96.9
Swain	87.0	56.7	136.1	24.6	26.0	22.3	112.6	84.2	158.4
Transylvania	41.9	38.3	86.2	19.9	18.3	40.2	62.6	57.5	126.4
Tyrrell	28.1	21.7	37.4	10.8	3.6	21.4	38.9	25.4	58.8
Union	35.2	21.0	84.6	19.0	17.9	22.2	54.9	39.2	109.1
Vance	57.2	34.0	77.4	30.5	29.3	31.1	89.0	64.3	110.1
Wake	27.4	11.7	68.7	27.7	21.1	43.5	55.5	33.1	113.3
Warren	38.4	27.5	41.9	25.6	34.3	22.1	64.0	61.8	64.0
Washington	45.4	21.3	65.1	10.2	8.5	11.6	57.6	29.9	80.2
Watauga	27.4	28.0	0.0	17.5	16.3	78.4	45.0	44.3	78.4
Wayne	44.6	24.2	72.1	21.6	19.0	24.5	66.7	43.4	97.4
Wilkes	40.0	39.3	49.9	16.6	15.8	23.6	57.3	55.7	76.1
Wilson	47.4	19.4	77.8	32.8	23.7	41.6	81.3	43.0	121.6
Yadkin	30.7	30.5	33.6	21.7	21.1	26.8	52.4	51.6	60.4
Yancey	33.8	34.0	27.8	12.8	12.5	27.8	46.7	46.4	55.6

*Number of events per 1,000 females 15-17. Pregnancies are the sum of live births, fetal deaths, and abortions. Numbers underlying the rates are given in Table 12.

Table 12
Live Births, Abortions, and Pregnancies for Females 15-17 by Race
North Carolina and Counties 1988-92

RESIDENCE	Live Births			Abortions			Pregnancies*		
	Total	White	Minority	Total	White	Minority	Total	White	Minority
North Carolina	29,154	13,636	15,518	17,683	10,313	7,095	47,186	24,084	22,827
COUNTY									
Alamance	389	203	186	366	229	124	763	434	316
Alexander	78	72	6	27	23	4	105	95	10
Alleghany	14	14	0	17	17	0	31	31	0
Anson	175	35	140	73	27	44	249	62	185
Ashe	64	62	2	35	31	3	99	93	5
Avery	58	58	0	24	23	1	85	84	1
Beaufort	246	73	173	103	46	55	351	119	230
Bertie	114	16	98	37	7	30	152	24	128
Bladen	151	45	106	58	29	29	214	74	140
Brunswick	254	158	96	111	81	30	369	243	126
Buncombe	615	435	180	530	412	114	1,155	854	297
Burke	339	294	45	146	122	22	486	417	67
Cabarrus	391	232	159	229	184	45	621	416	205
Caldwell	399	338	61	147	129	15	552	471	78
Camden	22	17	5	12	9	3	34	26	8
Carteret	176	145	31	110	97	13	287	243	44
Caswell	54	25	29	45	14	29	100	39	59
Catawba	530	375	155	304	231	70	842	611	228
Chatham	128	64	64	93	51	38	223	116	103
Cherokee	96	94	2	29	27	2	125	121	4
Chowan	57	17	40	24	15	9	81	32	49
Clay	21	21	0	6	6	0	28	28	0
Cleveland	598	290	308	197	136	60	802	426	375
Columbus	299	117	182	110	54	53	412	173	236
Craven	381	169	212	195	118	75	577	287	288
Cumberland	1,309	510	799	831	373	451	2,152	888	1,257
Currituck	41	30	11	24	21	3	65	51	14
Dare	28	20	8	39	35	3	68	56	11
Davidson	558	429	129	353	268	76	924	704	211
Davie	96	68	28	66	51	15	164	121	43
Duplin	215	102	113	125	52	72	341	155	185
Durham	733	115	618	746	233	503	1,486	348	1,128
Edgecombe	436	81	355	209	80	126	649	162	484
Forsyth	1,059	363	696	940	459	471	2,006	822	1,174
Franklin	163	41	122	84	35	49	252	79	173
Gaston	1,090	781	309	428	338	85	1,524	1,122	397
Gates	24	6	18	14	5	9	38	11	27
Graham	35	31	4	6	5	1	41	36	5
Granville	164	45	119	134	69	64	298	114	183
Greene	65	13	52	35	11	23	101	25	75
Guilford	1,328	461	867	1,251	637	538	2,596	1,101	1,419
Halifax	356	74	282	181	77	102	542	153	387
Harnett	376	168	208	191	110	79	570	279	289
Haywood	193	189	4	89	81	8	283	271	12
Henderson	229	198	31	138	121	17	370	322	48
Hertford	148	21	127	63	19	44	213	40	173
Hoke	190	35	155	49	22	26	239	57	181
Hyde	24	4	20	16	8	8	40	12	28
Iredell	446	255	191	208	136	71	660	396	263

*Pregnancies are the sum of live births, fetal deaths, and abortions.

Table 12 (continued)
Live Births, Abortions, and Pregnancies for Females 15-17 by Race
North Carolina and Counties 1988-92

RESIDENCE COUNTY	Live Births			Abortions			Pregnancies*		
	Total	White	Minority	Total	White	Minority	Total	White	Minority
Jackson	90	62	28	57	43	14	148	106	42
Johnston	381	194	187	215	149	64	602	347	253
Jones	41	12	29	23	7	16	65	20	45
Lee	229	99	130	115	63	49	345	162	180
Lenoir	358	91	267	177	93	80	541	186	351
Lincoln	257	199	58	107	90	17	367	291	76
McDowell	175	156	19	96	93	3	271	249	22
Macon	53	52	1	35	33	2	90	87	3
Madison	44	43	1	28	28	0	73	72	1
Martin	142	24	118	50	19	31	195	43	152
Mecklenburg	2,192	577	1,615	1,703	841	853	3,920	1,422	2,489
Mitchell	55	55	0	17	16	1	72	71	1
Montgomery	170	83	87	66	43	23	237	127	110
Moore	232	113	119	132	85	46	368	200	167
Nash	342	114	228	170	85	78	517	201	309
New Hanover	507	192	315	371	234	136	882	427	454
Northampton	126	21	105	67	15	51	195	36	158
Onslow	493	328	165	303	206	95	797	535	260
Orange	147	62	85	245	143	93	393	205	179
Pamlico	46	21	25	24	12	12	70	33	37
Pasquotank	130	57	73	62	37	24	197	96	100
Pender	114	43	71	72	39	33	187	83	104
Perquimans	45	11	34	2	2	0	47	13	34
Person	99	44	55	114	62	48	214	106	104
Pitt	520	110	410	211	102	104	740	213	522
Polk	39	34	5	27	21	6	67	56	11
Randolph	414	362	52	265	217	39	684	583	92
Richmond	290	136	154	118	72	45	410	208	201
Robeson	831	135	696	263	83	180	1,100	219	881
Rockingham	414	241	173	247	146	90	668	388	269
Rowan	488	281	207	245	162	83	737	445	292
Rutherford	308	232	76	112	91	20	424	326	97
Sampson	260	117	143	117	52	62	380	169	208
Scotland	314	93	221	64	36	28	385	129	256
Stanly	249	167	82	115	86	29	370	255	115
Stokes	99	90	9	78	71	6	180	163	16
Surry	242	218	24	109	102	7	353	322	31
Swain	92	37	55	26	17	9	119	55	64
Transylvania	99	84	15	47	40	7	148	126	22
Tyrrell	13	6	7	5	1	4	18	7	11
Union	334	155	179	180	132	47	521	289	231
Vance	259	72	187	138	62	75	403	136	266
Wake	1,033	321	712	1,044	578	451	2,095	906	1,174
Warren	69	12	57	46	15	30	115	27	87
Washington	71	15	56	16	6	10	90	21	69
Watauga	72	72	0	46	42	4	118	114	4
Wayne	479	149	330	232	117	112	716	267	446
Wilkes	245	226	19	102	91	9	351	320	29
Wilson	358	76	282	248	93	151	614	169	441
Yadkin	89	84	5	63	58	4	152	142	9
Yancey	50	49	1	19	18	1	69	67	2

*Pregnancies are the sum of live births, fetal deaths, and abortions.

Table 13

Adolescent Pregnancies, Pregnancy Rates, and Attributable Risks (Ages 10-19) North Carolina and Counties 1992

Residence	Number of Pregnancies*	Pregnancy Rate*	Attributable Risk (Percent)**
North Carolina	23,711	52.8	
COUNTIES			
Cumberland	1,219	61.5	1.96
Mecklenburg	1,775	51.2	1.93
Forsyth	1,002	60.0	1.55
Guilford	1,206	51.8	1.35
Onslow	619	73.9	1.27
Gaston	690	59.5	1.05
Robeson	584	65.4	1.03
Durham	680	56.0	0.92
Edgecombe	321	75.5	0.67
Buncombe	555	52.3	0.64
Catawba	445	56.8	0.62
Cleveland	357	63.9	0.61
New Hanover	476	54.6	0.61
Harnett	335	65.9	0.60
Halifax	287	70.4	0.56
Pitt	463	52.9	0.55
Davidson	434	52.7	0.51
Rockingham	316	59.1	0.47
Wayne	383	53.5	0.47
Wilson	290	59.9	0.45
Caldwell	273	61.0	0.43
Alamance	350	52.5	0.41
Craven	314	54.4	0.40
Nash	300	54.7	0.39
Iredell	322	52.8	0.38
Richmond	211	65.9	0.38
Johnston	300	54.0	0.37
Scotland	191	66.1	0.34
Lenoir	232	57.0	0.33
Brunswick	200	61.6	0.32
Rutherford	218	58.5	0.32
Columbus	214	57.6	0.31
Lee	183	61.9	0.30
Stanly	197	56.7	0.27

Table 13 (continued)

Adolescent Pregnancies, Pregnancy Rates, and Attributable Risks (Ages 10-19)
North Carolina and Counties 1992

Residence	Number of Pregnancies*	Pregnancy Rate*	Attributable Risk (Percent)**
Vance	170	60.6	0.27
Randolph	321	46.9	0.26
Montgomery	119	76.1	0.25
Rowan	333	46.2	0.25
Macon	140	62.3	0.23
Hoke	122	66.5	0.22
Burke	229	48.8	0.21
Duplin	157	54.8	0.20
Sampson	179	51.1	0.19
Beauford	158	52.9	0.19
Moore	181	50.3	0.19
Granville	139	55.7	0.19
Wilkes	186	49.1	0.18
Hertford	106	61.3	0.17
McDowell	108	59.2	0.16
Anson	104	59.9	0.16
Henderson	182	47.3	0.15
Northampton	85	62.9	0.14
Pender	102	55.1	0.13
Swain	55	81.1	0.12
Haywood	128	49.2	0.12
Greeene	70	64.8	0.12
Bladen	108	51.9	0.12
Chatham	107	49.6	0.11
Lincoln	151	44.3	0.09
Davie	89	49.8	0.09
Surry	169	43.4	0.09
Bertie	79	50.5	0.08
Franklin	118	45.4	0.08
Person	93	47.1	0.08
Transylvania	78	48.1	0.07
Jones	41	62.5	0.07
Jackson	99	43.9	0.06
Yancey	46	50.3	0.05
Alleghany	31	55.9	0.04
Warren	51	45.4	0.03
Caswell	58	44.1	0.03
Polk	35	48.2	0.03

Table 13 (continued)

Adolescent Pregnancies, Pregnancy Rates, and Attributable Risks (Ages 10-19)
North Carolina and Counties 1992

Residence	Number of Pregnancies*	Pregnancy Rate*	Attributable Risk (Percent)**
Mitchell	38	46.3	0.03
Graham	23	50.9	0.02
Hyde	15	44.4	0.01
NONREFERENT TOTAL	**20,745**	**56.0**	**28.05**
REFERENT COUNTIES			
Carteret	140	43.0	
Union	273	42.9	
Cabarrus	278	42.8	
Chowan	39	41.7	
Pamlico	30	41.7	
Pasquotank	97	41.2	
Cherokee	54	40.3	
Tyrrell	12	40.3	
Wake	1,169	40.1	
Yadkin	74	40.0	
Washington	42	40.0	
Martin	44	38.7	
Ashe	51	38.3	
Madison	48	38.0	
Stokes	93	38.0	
Perquimans	25	36.4	
Alexander	67	36.4	
Avery	37	34.6	
Gates	20	33.2	
Currituck	30	32.6	
Clay	12	27.8	
Orange	208	27.7	
Watauga	84	25.6	
Dare	32	24.9	
Camden	7	20.2	
REFERENT TOTAL	**2,966**	**38.02**	

*Pregnancies are the sum of live births, fetal deaths, and abortions. The rate is the number of pregnancies per 1,000 females 10-19.

**The percentage of statewide adolescent pregnancies that would not have occurred if the effect of living in a particular county were absent.

Table 14

Selected Live Birth Statistics for Adolescent Mothers with Percent Changes Since 1978 by Age and Race North Carolina 1992

Age and Race	Number of Live Births 1992	Number of Live Births Pct. Chg.	Percent Unmarried 1992	Percent Unmarried Pct. Chg.	Percent Multiparous[1] 1992	Percent Multiparous[1] Pct. Chg.	Percent Late/NoCare[2] 1992	Percent Late/NoCare[2] Pct. Chg.	Percent Low Birthweight[3] 1992	Percent Low Birthweight[3] Pct. Chg.
10-14										
Total	371	-0.8	95.7	+9.5	8.4	+55.6	55.0	-13.8	12.4	-20.0
White	82	-20.4	84.1	+46.8	4.9	+25.6	45.1	-25.8	4.9	-58.1
Minority	289	+6.6	99.0	+0.1	9.3	+57.6	57.8	-10.8	14.5	-14.7
15-17										
Total	5,744	-14.3	82.5	+39.4	24.4	+53.5	41.6	-21.5	12.2	+4.3
White	2,669	-18.6	64.7	+137.0	17.8	+50.8	35.2	-23.1	9.4	+8.0
Minority	3,075	-10.2	98.0	+9.3	30.1	+54.4	47.2	-21.3	14.6	+0.7
18-19										
Total	9,896	-3.6	64.5	+81.2	43.6	+25.6	35.5	-13.0	10.2	-3.8
White	5,553	-8.7	43.1	+231.5	37.5	+26.7	28.6	-16.1	8.4	+1.2
Minority	4,343	+3.9	91.8	+34.0	51.3	+22.4	44.4	-11.9	12.6	-9.4
Total 10-19										
Total	16,011	-7.6	71.7	+56.6	35.9	+35.0	38.2	-16.8	11.0	-0.9
White	8,304	-12.2	50.5	+173.0	30.9	+33.8	30.9	-19.3	8.7	+2.4
Minority	7,707	-2.1	94.5	+19.9	41.3	+34.1	46.0	-16.2	13.5	-5.6

[1]Birth order 2 or more.
[2]No prenatal care or care after first trimester.
[3]Under 2500 grams.

Note: Data for 1978 were taken from reference 2.

Table 15
Numbers and Percentages of Mothers Aged 10-19 Having Late or No Prenatal Care* by Race North Carolina and Counties 1988-92

	Total		Whites		Minorities	
RESIDENCE	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
North Carolina	36,230	44.5	15,686	37.1	20,544	52.3
COUNTY						
Alamance	556	48.2	285	42.7	271	55.8
Alexander	143	54.4	125	54.1	18	56.3
Alleghany	18	30.5	18	30.5	0	0.0
Anson	238	53.6	34	34.3	204	59.1
Ashe	54	25.5	53	25.4	1	33.3
Avery	87	49.2	87	49.2	0	0.0
Beaufort	263	43.8	78	35.1	185	48.9
Bertie	87	30.2	4	12.9	83	32.3
Bladen	225	53.1	58	39.5	167	60.3
Brunswick	329	46.6	208	44.8	121	50.0
Buncombe	420	23.6	269	19.9	151	35.4
Burke	334	34.5	275	32.4	59	49.2
Cabarrus	628	55.1	356	48.4	272	67.3
Caldwell	457	42.1	396	40.8	61	52.6
Camden	26	49.1	16	42.1	10	66.7
Carteret	205	40.2	158	36.9	47	57.3
Caswell	76	47.2	22	31.0	54	60.0
Catawba	677	43.4	438	37.9	239	58.9
Chatham	157	44.7	68	34.7	89	57.4
Cherokee	63	27.2	58	26.0	5	55.6
Chowan	55	36.7	19	35.8	36	37.1
Clay	10	15.2	10	15.2	0	0.0
Cleveland	880	59.3	394	49.4	486	70.7
Columbus	281	35.8	99	29.7	182	40.3
Craven	574	48.9	278	44.7	296	53.5
Cumberland	1,503	35.0	560	27.5	943	41.8
Currituck	50	46.3	35	41.2	15	65.2
Dare	37	35.2	29	34.9	8	36.4
Davidson	726	46.2	529	42.9	197	58.5
Davie	105	36.6	81	34.5	24	46.2
Duplin	280	46.9	105	36.1	175	57.2
Durham	817	43.3	139	36.2	678	45.2
Edgecombe	564	52.8	84	37.5	480	56.8
Forsyth	1,132	39.4	382	33.8	750	43.0
Franklin	197	47.7	59	46.5	138	48.3
Gaston	1,294	44.1	844	39.0	450	58.4
Gates	22	32.8	6	42.9	16	30.2
Graham	27	29.7	21	27.3	6	42.9
Granville	194	43.2	55	36.2	139	46.8
Greene	69	37.5	12	24.5	57	42.2
Guilford	1,782	49.5	595	42.7	1,187	53.9
Halifax	407	41.8	71	31.1	336	45.0
Harnett	538	44.8	214	33.4	324	57.9
Haywood	196	41.2	193	41.4	3	30.0
Henderson	167	25.7	141	24.5	26	35.6
Hertford	127	32.2	16	26.2	111	33.3
Hoke	166	34.2	31	25.6	135	37.0
Hyde	35	51.5	8	38.1	27	57.4
Iredell	762	61.8	403	53.4	359	74.9

*No care or care after the first trimester.

Table 15 (continued)
Numbers and Percentages of Mothers Aged 10-19 Having Late or No Prenatal Care* by Race
North Carolina and Counties 1988-92

RESIDENCE COUNTY	Total		Whites		Minorities	
	Number	Percent	Number	Percent	Number	Percent
Jackson	78	28.9	53	27.9	25	31.3
Johnston	619	60.0	314	54.6	305	66.7
Jones	63	55.8	21	47.7	42	60.9
Lee	266	41.6	111	33.8	155	49.8
Lenoir	581	68.0	124	51.0	457	74.8
Lincoln	384	55.9	282	51.6	102	72.9
McDowell	188	36.5	159	34.1	29	59.2
Macon	49	28.2	47	27.6	2	50.0
Madison	29	19.5	28	18.9	1	100.0
Martin	130	33.4	20	22.7	110	36.5
Mecklenburg	2,430	42.8	605	34.0	1,825	46.8
Mitchell	39	23.8	39	24.2	0	0.0
Montgomery	183	42.6	89	37.6	94	48.7
Moore	290	45.3	139	40.2	151	51.4
Nash	547	59.3	179	52.5	368	63.3
New Hanover	663	51.1	250	42.4	413	58.3
Northampton	125	38.3	12	24.5	113	40.8
Onslow	677	29.2	468	26.7	209	36.9
Orange	162	39.9	56	27.7	106	52.0
Pamlico	52	46.4	13	25.0	39	65.0
Pasquotank	179	46.3	61	36.3	118	53.9
Pender	182	54.2	81	50.3	101	57.7
Perquimans	59	50.0	12	38.7	47	54.0
Person	134	39.5	47	30.7	87	46.8
Pitt	564	41.8	108	29.7	456	46.3
Polk	46	41.4	35	38.0	11	57.9
Randolph	517	44.3	428	42.0	89	59.7
Richmond	385	49.1	156	40.7	229	57.1
Robeson	1,229	53.5	178	44.4	1,051	55.4
Rockingham	502	45.6	242	35.0	260	63.3
Rowan	776	59.6	448	54.4	328	68.6
Rutherford	237	27.1	151	23.1	86	39.4
Sampson	376	55.8	153	47.8	223	63.0
Scotland	478	60.4	128	49.2	350	65.9
Stanly	310	45.9	211	42.5	99	55.3
Stokes	86	28.1	66	24.4	20	57.1
Surry	179	25.6	155	24.4	24	38.1
Swain	79	34.2	28	27.7	51	39.2
Transylvania	101	41.2	80	38.3	21	58.3
Tyrrell	10	25.6	1	7.1	9	36.0
Union	441	45.2	162	32.7	279	58.2
Vance	388	53.8	85	39.0	303	60.2
Wake	1,476	50.8	464	42.8	1,012	55.6
Warren	73	33.3	10	27.8	63	34.4
Washington	78	36.3	16	29.6	62	38.5
Watauga	72	35.3	72	36.0	0	0.0
Wayne	978	71.0	315	58.6	663	78.9
Wilkes	162	22.6	149	22.9	13	20.3
Wilson	397	41.9	85	32.7	312	45.3
Yadkin	103	40.9	93	40.1	10	50.0
Yancey	38	21.7	38	21.8	0	0.0

*No care or care after the first trimester.

Table 16

Percentage of Adolescent Mothers Who Smoked by Age and Race
North Carolina 1992

Age	Total	White	Minority
10-14	7.0	19.5	3.5
15-17	16.4	28.5	5.9
18-19	21.0	29.8	9.8
Total 10-19	19.0	29.3	8.0

Table 17

Percentages of Live Births by Type of Service, Race, and Adolescent Age
North Carolina 1988-1992

		Year of Birth				
Type of Service, Race, and Age		1988	1989	1990	1991	1992
Newborn Hospitalization Paid by Medicaid						
Whites	10-17	42.6	56.6	71.1	80.1	85.6
	18-19	34.1	46.8	57.2	70.2	73.6
Minorities	10-17	62.1	72.4	83.2	88.7	90.3
	18-19	64.8	73.1	80.3	86.0	87.8
Mother Received Prenatal WIC*						
Whites	10-17	55.0	62.0	65.0	69.7	73.3
	18-19	43.9	49.6	53.8	61.8	64.6
Minorities	10-17	70.6	73.9	76.1	78.4	79.8
	18-19	63.7	68.6	71.0	73.5	75.5
Mother Received Prenatal Care in Health Department						
Whites	10-17	42.9	47.7	47.9	51.7	44.0
	18-19	34.5	37.1	39.9	44.5	39.4
Minorities	10-17	51.1	52.8	56.4	58.3	51.9
	18-19	48.0	48.9	51.1	52.7	48.0

*Women, Infants, and Children supplemental food program; see Glossary.

Table 18

Percentages of Medicaid Births by Type of Service, Race, and Adolescent Age North Carolina 1988-1992

Type of Service, Race, and Age		Year of Birth 1988	1989	1990	1991	1992
Mother Received Prenatal WIC*						
Whites	10-17	70.2	75.1	74.5	76.4	77.8
	18-19	69.6	74.1	73.2	73.6	75.1
Minorities	10-17	76.4	79.5	79.0	80.5	81.5
	18-19	73.3	76.6	76.1	77.5	78.6
Mother Received Maternity Care Coordination**						
Whites	10-17	22.6	37.6	40.8	45.2	51.5
	18-19	23.1	36.2	39.5	43.6	46.4
Minorities	10-17	28.7	41.1	51.7	56.3	60.6
	18-19	23.9	39.7	47.4	50.7	54.2

*Women, Infants, and Children supplemental food program; see Glossary.
**Case management; see Glossary.

Table 19

Fetal, Neonatal, Postneonatal, and Infant Deaths and Death Rates Among Adolescent Mothers by Age and Race North Carolina Birth Year 1991

Maternal Age and Type of Death	Total		Whites		Minorities	
	Number	Rate	Number	Rate	Number	Rate
15-17						
Fetal[1]	58	9.6	19	6.6	39	12.2
Neonatal[2]	54	9.0	15	5.3	39	12.4
Postneonatal[3]	27	4.5	17	6.0	10	3.2
Infant[4]	81	13.5	32	11.3	49	15.6
18-19						
Fetal[1]	102	10.0	49	8.7	53	11.5
Neonatal[2]	91	9.0	42	7.5	49	10.8
Postneonatal[3]	38	3.8	18	3.3	20	4.4
Infant[4]	129	12.8	60	10.8	69	15.2
TOTAL 10-19						
Fetal[1]	164	9.8	69	8.1	95	11.7
Neonatal[2]	150	9.1	57	6.7	93	11.6
Postneonatal[3]	65	4.0	35	4.1	30	3.8
Infant[4]	215	13.0	92	10.8	123	15.3

[1]Stillbirths of at least 20 weeks gestation. Rate is per 1,000 deliveries (live births plus fetal deaths).
[2]Death of a liveborn child under 28 days of age. Rate is per 1,000 live births.
[3]Death of an infant 28 days to one year of age. Rate is per 1,000 neonatal survivors.
[4]Death of a liveborn child under one year of age. Rate is per 1,000 live births.

Table 20

Infant Deaths and Death Rates Among Adolescent Mothers by Underlying Cause and Race North Carolina Birth Year 1991

Underlying Cause of Death	Total		Whites		Minorities	
	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]
Total Infant Deaths	215	13.0	92	10.8	123	15.3
SIDS[2]	35	2.1	20	2.4	15	1.9
Low Birthweight/ Respiratory Distress[3]	52	3.1	21	2.5	31	3.9
Other Respiratory Problems[4]	13	0.8	2	0.2	11	1.4
Birth Defects[5]	31	1.9	15	1.8	16	2.0
Injuries[6]	11	0.7	2	0.2	9	1.1

[1]Number of infant deaths per 1,000 live births.
[2]ICD-9 Code 798.0.
[3]ICD-9 Codes 764, 765, 769-770.7.
[4]ICD-9 Code 770.8.
[5]ICD-9 Codes 740-759.
[6]ICD-9 Codes 800-999.

Table 21

Adolescent Cases and Rates for Sexually Transmitted Diseases by Age and Race-Sex
North Carolina 1992

Age and Disease	Total Number	Total Rate[1]	White Males Number	White Males Rate[1]	White Females Number	White Females Rate[1]	Minority Males Number	Minority Males Rate[1]	Minority Females Number	Minority Females Rate[1]
AGES 10-14										
Syphilis[2]	45	10.3	0	0.0	6	4.1	4	5.9	35	52.6
Gonorrhea[3]	551	125.7	1	0.6	67	45.2	99	147.2	384	576.6
Chlamydia	382	87.1	0	0.0	99	66.8	17	25.3	266	399.4
AGES 15-19										
Syphilis[2]	621	130.1	17	9.8	44	27.0	161	231.2	399	563.4
Gonorrhea[3]	7,994	1,674.8	172	99.0	663	406.4	3,559	5,110.0	3,600	5,083.2
Chlamydia	5,777	1,210.3	95	54.7	1,808	1,108.2	376	539.9	3,498	4,939.1

[1]Reported cases per 100,000 population.
[2]All stages.
[3]All sites.

Table 22

Number and Percentage of Adolescents Classified as Overweight by Race
North Carolina Child Health Program 1988-91

Sex and Age	Total		Whites		Blacks	
	Number	Percentage	Number	Percentage	Number	Percentage
Males						
10-11	612	31.1	338	35.0	256	27.9
12-14	801	28.8	440	32.7	341	25.4
15-17	489	30.3	254	35.3	228	27.0
18	36	19.4	16	20.5	19	19.0
Females						
10-11	667	32 4	310	31.2	331	33.3
12-14	874	30-3	414	29.7	448	31.5
15-17	487	29.3	263	31.9	217	27.6
18	48	24.0	21	21.6	26	27.4
Males 12-18	1,326	28.9	710	33.1	588	25.7
Females 12-18	1,409	29.7	698	30.2	691	30.0
Total 12-18	2,735	29.3	1,408	31.6	1,279	27.9

Note: Based on Body Mass Index (BMI), overweight is defined by the age-sex-specific 85th percentile values for the combined samples of U.S. children examined in the first two National Health and Nutrition Examination Surveys (NHANES I and NHANES II, 1971-1980).[26] BMI is calculated by dividing weight in kilograms by the square of height in meters. Here, BMI is based on the age, height, and weight of an individual at last visit (during the 4-year period) for which height and weight were recorded. Counts were insufficient to examine the data for American Indians and Hispanics.

Table 23

Hospital Discharges and Rates for Adolescent Age-Sex Groups by Primary Diagnosis
North Carolina 1991

Primary Diagnosis	Ages 10-19 Males and Females		Ages 10-14 Males		Ages 10-14 Females		Ages 15-19 Males		Ages 15-19 Females	
	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]
Total Discharges	45,102	483.3	5,267	234.3	4,893	226.9	7,794	308.8	27,148	1,129.4
Diseases of Heart[2]	210	2.3	44	2.0	28	1.3	87	3.4	51	2.1
Cancer[3]	254	2.7	74	3.3	46	2.1	73	2.9	61	2.5
Diabetes Mellitus[4]	801	8.6	126	5.6	199	9.2	209	8.3	267	11.1
Chronic Obstructive Pulmonary Diseases[5]	842	9.0	286	12.7	226	10.5	138	5.5	192	8.0
Diseases of Genitourinary System[6]	2,022	21.7	174	7.7	283	13.1	246	9.7	1,319	54.9
Normal Delivery and Complications of Pregnancy, Childbirth, and Puerperium[7]	19,438	208.3	-	-	527	24.4	-	-	18,911	786.8
Mental Disorders[8]	4,639	49.7	824	36.7	806	37.4	1,503	59.5	1,506	62.7
Injury and Poisoning[9]	4,677	50.1	961	42.7	474	22.0	2,137	84.7	1,105	46.0

[1]Discharges per 10,000 population.
[2]ICD-9 Codes 390-398, 402, 404-429.
[3]ICD-9 Codes 140-208.
[4]ICD-9 Code 250.
[5]ICD-9 Codes 490-496.
[6]ICD-9 Codes 580-629.
[7]ICD-9 Codes 630-676.
[8]ICD-9 Codes 290-319.
[9]ICD-9 Codes 800-989.

Table 24

Adolescents Served in State Psychiatric Hospitals,[1] Mental Retardation Centers,[2] and Alcohol and Drug Abuse Treatment Centers[3] by Specified Principal or Primary Diagnosis, Age, Race, and Sex
North Carolina FY 1984 and CY 1992

Patient Characteristics	Total		Diagnosis: Developmental Disability		Substance Abuse		Mental Illness	
	1984	1992	1984	1992	1984	1992	1984	1992
Total	1,839	1,407	85	125	204	178	1,550	1,104
Age								
10-17	1,152	1,019	51	82	69	50	1,032	887
18-19	687	388	34	43	135	128	518	217
Race								
White	1,254	916	36	71	178	126	1,040	719
Black	568	459	47	53	21	52	500	354
Other/Unknown	17	32	2	1	5	0	10	31
Sex								
Male	1,177	903	70	84	162	140	945	679
Female	662	504	15	41	42	38	605	425

[1]Broughton, Cherry, Dix, and Umstead.
[2]Black Mountain, Caswell, Murdock, O'Berry, and Western.
[3]Black Mountain, Butner, and Jones.

Source:N.C. Department of Human Resources, Division of Mental Health, Developmental Disability,and Substance Abuse Services.

Table 25

Adolescents Served in Area Mental Health Centers by Specified Principal or Primary Diagnosis, Age, Race, and Sex North Carolina FY 1984 and CY 1992

Patient Characteristics	Total		Diagnosis: Developmental Disability		Diagnosis: Substance Abuse		Diagnosis: Mental Illness	
	1984	1992	1984	1992	1984	1992	1984	1992
Total	20,791	33,988	1,505	2,019	1,460	4,663	17,826	27,306
Age								
10-17	16,572	28,096	1,085	1,470	613	2,512	14,874	24,114
18-19	4,219	5,892	420	549	847	2,151	2,952	3,192
Race								
White	14,804	21,878	878	1,249	1,228	3,425	12,698	17,204
Black	5,621	10,860	577	704	189	1,086	4,855	9,070
Other/Unknown	366	1,250	50	66	43	152	273	1,032
Sex								
Male	12,289	20,426	933	1,282	1,130	3,564	10,226	15,580
Female	8,502	13,562	572	737	330	1,099	7,600	11,726

Source:N.C. Department of Human Resources, Division of Mental Health, Developmental Disabili ties, and Substance Abuse Services.

Table 26

Percentages of Prenatal WIC Participants by Race, Marital Status, and Education North Carolina Mothers 1992

Patient Characteristics	Total	Mother's Age at Delivery	
	Under 20	Under 18	18-19
	n = 11,563	n = 4,699	n = 6,864
Race			
White	51.0	45.5	54.8
Black	48.6	54.1	44.8
Other	0.3	0.3	0.4
Marital Status			
Married	22.8	14.2	28.7
Not Married*	77.2	85.8	71.3
Highest Grade Completed			
0-8	11.8	20.8	5.6
9-11	56.8	72.9	45.8
12 or more	31.4	6.4	48.6

*Mother has never been legally married or was widowed or legally divorced more than 280 days prior to giving birth.

Table 27

Percentages of Adolescent Public Family Planning Patients by Patient Characteristics North Carolina 1992

Patient Characteristics	Total	Patient's Age Under 20	Under 18	18-19
		n = 44,924	n = 24,200	n = 20,724
Race				
White		52.6	50.3	55.3
Black		44.7	47.3	41.7
American Indian		1.6	1.5	1.6
Other		1.1	0.8	1.4
Marital Status				
Married		8.5	5.6	11.9
Not Married*		87.9	90.2	85.3
Not Stated		3.5	4.2	2.8
Highest Grade Completed				
0-8		18.0	25.6	9.0
9-11		46.6	50.3	42.2
12 or more		22.2	10.5	35.8
Not Stated		13.3	13.6	12.9
Percent of Poverty Level				
At or below 100		87.9	90.8	84.5
101-149		6.7	4.8	9.0
150 or more		5.4	4.4	6.6
Patient Claimed Title XIX (Medicaid) Reimbursement		21.5	20.2	23.0
Contraceptive Method				
Pill		88.8	89.4	88.1
Foam and Condom		6.1	6.1	6.0
Other		1.7	1.4	2.1
None		3.1	2.9	3.3
Not Stated		0.4	0.3	0.5

*Never married, separated, widowed or divorced.

APPENDIX 1

Key Health Status Objectives Targeting Adolescents and Young Adults

Duplicate objectives, which appear in two or more priority areas, are marked with an asterisk (*).

Except as otherwise noted, all rates in the following objectives are annual. Where the baseline rate is age adjusted, it is age adjusted to the 1940 U.S. population, and the target is age adjusted also. If a rate is age adjusted, the crude baseline rate may be found in Appendix D.

2.3* Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12 through 19. (Baseline: 26 percent for people aged 20 through 74 in 1976-80, 24 percent for men and 27 percent for women; 15 percent for adolescents aged 12 through 19 in 1976-80)

Note: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12 through 14, 24.3 for males aged 15 through 17, 25.8 for males aged 18 through 19, 23.4 for females aged 12 through 14, 24.8 for females aged 15 through 17, and 25.7 for females aged 18 through 19. The values for adolescents are the age- and gender-specific 85th percentile values of the 1976-80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.

4.1b Reduce deaths among people aged 15 through 24 caused by alcohol-related motor vehicle crashes to no more than 18 per 100,000. (Baseline: 21.5 per 100,000 in 1987)

5.1 Reduce pregnancies among girls aged 17 and younger to no more than 50 per 1,000 adolescents. (Baseline: 71.1 pregnancies per 1,000 girls aged 15 through 17 in 1985)

Special Population Targets

	Pregnancies (per 1,000)	*1985 Baseline*	*2000 Target*
5.1a	Black adolescent girls aged 15-19	186[†]	120
5.1b	Hispanic adolescent girls aged 15-19	158	105

[†]*Nonwhite adolescents*

Note: For black and Hispanic adolescent girls, baseline data are unavailable for those aged 15 through 17. The targets for these two populations are based on data for women aged 15 through 19. If more complete data become available, a 35-percent reduction from baseline figures should be used as the target.

6.1a* Reduce suicides among youth aged 15 through 19 to no more than 8.2 per 100,000. (Baseline: 10.3 per 100,000 in 1987)

6.1b* Reduce suicides among men aged 20 through 34 to no more than 21.4 per 100,000. (Baseline: 25.2 per 100,000 in 1987)

6.2* Reduce by 15 percent the incidence of injurious suicide attempts among adolescents aged 14 through 17. (Baseline data available in 1991)

6.3 Reduce to less than 10 percent the prevalence of mental disorders among children and adolescents. (Baseline: An estimated 12 percent among youth younger than age 18 in 1989)

7.1 Reduce homicides to no more than 7.2 per 100,000 people. (Age-adjusted baseline: 8.5 per 100,000 in 1987)

Special Population Targets

	Homicide Rate (per 100,000)	*1987 Baseline*	*2000 Target*
7.1b	Spouses aged 15-34	1.7	1.4
7.1c	Black men aged 15-34	90.5	72.4
7.1d	Hispanic men aged 15-34	53.1	42.5
7.1e	Black women aged 15-34	20.0	16.0
7.1f	American Indians/Alaska Natives in Reservation States	14.1	11.3

7.7a Reduce rape and attempted rape of women aged 12 through 34 to no more than 225 per 100,000. (Baseline: 250 per 100,000 in 1986)

9.3b Reduce deaths among youth aged 15 through 24 caused by motor vehicle crashes to no more than 33 per 100,000. (Baseline: 36.9 per 100,000 in 1987)

13.1 Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 35 percent among children aged 6 through 8 and no more than 60 percent among adolescents aged 15. (Baseline: 53 percent of children aged 6 through 8 in 1986-87; 78 percent of adolescents aged 15 in 1986-87)

Special Population Target

	Dental Caries Prevalence	*1983-84 Baseline*	*2000 Target*
13.1d	American Indian/Alaska Native adolescents aged 15	93%	70%

13.2 Reduce untreated dental caries so that the proportion of children with untreated caries (in permanent or primary teeth) is no more than 20 percent among children aged 6 through 8 and no more than 15 percent among adolescents aged 15. (Baseline: 27 percent of children aged 6-8 in 1986; 23 percent of adolescents aged 15 in 1986-87)

Special Population Targets

	Untreated Dental Caries Among Adolescents	*1986-87 Baseline*	*2000 Target*
13.2a	Adolescents aged 15 whose parents have less than high school education	41%	25%
13.2b	American Indian/Alaska Native adolescents aged 15	84%†	40%
13.2c	Black adolescents aged 15	38%	20%
13.2d	Hispanic adolescents aged 15	31-47%‡	25%

†*1983-84 baseline* ‡*1982-84 baseline*

19.1b Reduce gonorrhea among adolescents aged 15 through 19 to an incidence of no more than 750 cases per 100,000. (Baseline: 1,123 per 100,000 in 1989)

Key Risk Reduction Objectives Targeting Adolescents and Young Adults

1.3* Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day. (Baseline: 22 percent of people aged 18 and older were active for at least 30 minutes 5 or more times per week and 12 percent were active 7 or more times per week in 1985)

Note: Light to moderate physical activity requires sustained, rhythmic muscular movements, is at least equivalent to sustained walking, and is performed at less than 60 percent of maximum heart rate for age. Maximum heart rate equals roughly 220 beats per minute minus age. Examples may include walking, swimming, cycling, dancing, gardening and yardwork, various domestic and occupational activities, and games and other childhood pursuits.

1.4 Increase to at least 20 percent the proportion of people aged 18 and older and to at least 75 percent the proportion of children and adolescents aged 6 through 17 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion. (Baseline: 12 percent for people aged 18 and older in 1985; 66 percent for youth aged 10 through 17 in 1984)

Special Population Target

	Vigorous Physical Activity	*1985 Baseline*	*2000 Target*
1.4a	Lower-income people aged 18 and older (annual family income <$20,000)	7%	12%

Note: Vigorous physical activities are rhythmic, repetitive physical activities that use large muscle groups at 60 percent or more of maximum heart rate for age. An exercise heart rate of 60 percent of maximum heart rate for age is about 50 percent of maximal cardiorespiratory capacity and is sufficient for cardiorespiratory conditioning. Maximum heart rate equals roughly 220 beats per minute minus age.

2.8 Increase calcium intake so at least 50 percent of youth aged 12 through 24 and 50 percent of pregnant and lactating women consume three or more servings daily of foods rich in calcium, and at least 50 percent of people aged 25 and older consume two or more servings daily. (Baseline: 7 percent of women and 14 percent of men aged 19 though 24 and 24 percent of pregnant and lactating women consumed three or more servings, and 15 percent of women and 23 percent of men aged 25 through 50 consumed two or more servings in 1985-86)

Note: The number of servings of foods rich in calcium is based on milk and milk products. A serving is considered to be 1 cup of skim milk or its equivalent in calcium (302 mg). The number of servings in this objective will generally provide approximately three-fourths of the 1989 Recommended Dietary Allowance (RDA) of calcium. The RDA is 1200 mg for people aged 12 through 24, 800 mg for people aged 25 and older, and 1200 mg for pregnant and lactating women.

3.5 Reduce the initiation of cigarette smoking by children and youth so that no more than 15 percent have become regular cigarette smokers by age 20. (Baseline: 30 percent of youth had become regular cigarette smokers by ages 20 through 24 in 1987)

Special Population Target

	Initiation of Smoking	*1987 Baseline*	*2000 Target*
3.5a	Lower socioeconomic status youth†	40%	18%

†*As measured by people aged 20-24 with a high school education or less*

3.9 Reduce smokeless tobacco use by males aged 12 through 24 to a prevalence of no more than 4 percent. (Baseline: 6.6 percent among males aged 12 through 17 in 1988; 8.9 percent among males aged 18 through 24 in 1987)

Special Population Target

	Smokeless Tobacco Use	*1986-87 Baseline*	*2000 Target*
3.9a	American Indian/Alaska Native youth	18-64%	10%

Note: For males aged 12 through 17, a smokeless tobacco user is someone who has used snuff or chewing tobacco in the preceding month. For males aged 18 through 24, a smokeless tobacco user is someone who has used either snuff or chewing tobacco at least 20 times and who currently uses snuff or chewing tobacco.

4.5 Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12 through 17. (Baseline: Age 11.6 for cigarettes, age 13.1 for alcohol, and age 13.4 for marijuana in 1988)

4.6 Reduce the proportion of young people who have used alcohol, marijuana, and cocaine in the past month, as follows:

Substance/Age	*1988 Baseline*	*2000 Target*
Alcohol/aged 12-17	25.2%	12.6%
Alcohol/aged 18-20	57.9%	29%
Marijuana/aged 12-17	6.4%	3.2%
Marijuana/aged 18-25	15.5%	7.8%
Cocaine/aged 12-17	1.1%	0.6%
Cocaine/aged 18-25	4.5%	2.3%

Note: The targets of this objective are consistent with the goals established by the Office of National Drug Control Policy, Executive Office of the President.

4.7 Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28 percent of high school seniors and 32 percent of college students. (Baseline: 33 percent of high school seniors and 41.7 percent of college students in 1989)

Note: Recent heavy drinking is defined as having 5 or more drinks on one occasion in the previous 2-week period as monitored by self-reports.

4.9 Increase the proportion of high school seniors who perceive social disapproval associated with the heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, as follows:

Behavior	*1989 Baseline*	*2000 Target*
Heavy use of alcohol	56.4%	70%
Occasional use of marijuana	71.1%	85%
Trying cocaine once or twice	88.9%	95%

Note: Heavy drinking is defined as having 5 or more drinks once or twice each weekend.

4.10 Increase the proportion of high school seniors who associate risk of physical or psychological harm with the heavy use of alcohol, regular use of marijuana, and experimentation with cocaine, as follows:

Behavior	*1989 Baseline*	*2000 Target*
Heavy use of alcohol	44%	70%
Regular use of marijuana	77.5%	90%
Trying cocaine once or twice	54.9%	80%

Note: Heavy drinking is defined as having 5 or more drinks once or twice each weekend.

4.11 Reduce to no more than 3 percent the proportion of male high school seniors who use anabolic steroids. (Baseline: 4.7 percent in 1989)

5.4* Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17. (Baseline: 27 percent of girls and 33 percent of boys by age 15; 50 percent of girls and 66 percent of boys by age 17; reported in 1988)

5.5 Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have abstained from sexual activity for the previous three months. (Baseline: 26 percent of sexually active girls aged 15 through 17 in 1988)

5.6 Increase to at least 90 percent the proportion of sexually active, unmarried people aged 19 and younger who use contraception, especially combined method contraception that both effectively prevents pregnancy and provides barrier protection against disease. (Baseline: 78 percent at most recent intercourse and 63 percent at first intercourse; 2 percent used oral contraceptives and the condom at most recent intercourse; among young women aged 15 through 19 reporting in 1988)

Note: Strategies to achieve this objective must be undertaken sensitively to avoid indirectly encouraging or condoning sexual activity among teens who are not yet sexually active.

7.9 Reduce by 20 percent the incidence of physical fighting among adolescents aged 14 through 17. (Baseline data available in 1991)

7.10 Reduce by 20 percent the incidence of weapon-carrying by adolescents aged 14 through 17. (Baseline data available in 1991)

8.2 Increase the high school graduation rate to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health. (Baseline: 79 percent of people aged 20 through 21 had graduated from high school with a regular diploma in 1989)

Note: This objective and its target are consistent with the National Education Goal to increase high school graduation rates. The baseline estimate is a proxy. When a measure is chosen to monitor the National Education Goal, the same measure and data source will be used to track this objective.

13.8 Increase to at least 50 percent the proportion of children who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth. (Baseline: 11 percent of children aged 8 and 8 percent of adolescents aged 14 in 1986-87)

Note: Progress toward this objective will be monitored based on prevalence of sealants in children at age 8 and at age 14, when the majority of first and second molars, respectively, are erupted.

18.4a* Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15 through 19 whose partners used a condom at last sexual intercourse. (Baseline: 26 percent in 1988)

Note: Strategies to achieve this objective must be undertaken sensitively to avoid indirectly encouraging or condoning sexual activity among teens who are not yet sexually active.

18.4b* Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15 through 19 who used a condom at last sexual intercourse. (Baseline: 57 percent in 1988)

Note: Strategies to achieve this objective must be undertaken sensitively to avoid indirectly encouraging or condoning sexual activity among teens who are not yet sexually active.

21.2c Increase to at least 50 percent the proportion of adolescents aged 13 through 18 who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force. (Baseline data available in 1991)

Key Services and Protection Objectives Targeting Adolescents and Young Adults

1.8 Increase to at least 50 percent the proportion of children and adolescents in 1st through 12th grade who participate in daily school physical education. (Baseline: 36 percent in 1984-86)

1.9 Increase to at least 50 percent the proportion of school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities. (Baseline: Students spent an estimated 27 percent of class time being physically active in 1983)

Note: Lifetime activities are activities that may be readily carried into adulthood because they generally need only one or two people. Examples include swimming, bicycling, jogging, and racquet sports. Also counted as lifetime activities are vigorous social activities such as dancing. Competitive group sports and activities typically played only by young children such as group games are excluded.

5.8 Increase to at least 85 percent the proportion of people aged 10 through 18 who have discussed human sexuality, including values surrounding sexuality, with their parents and/or have received information through another parentally-endorsed source, such as youth, school, or religious programs. (Baseline: 66 percent of people aged 13 through 18 have discussed sexuality with their parents; reported in 1986)

Note: This objective, which supports family communication on a range of vital personal health issues, will be tracked using the National Health Interview Survey, a continuing, voluntary, national sample survey of adults who report on household characteristics including such items as illnesses, injuries, use of health services, and demographic characteristics.

5.10* Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling. (Baseline data available in 1992)

8.9 Increase to at least 75 percent the proportion of people aged 10 and older who have discussed issues related to nutrition, physical activity, sexual behavior, tobacco, alcohol, other drugs, or safety with family members on at least one occasion during the preceding month. (Baseline data available in 1991)

Note: This objective, which supports family communication on a range of vital personal health issues, will be tracked using the National Health Interview Survey, a continuing, voluntary, national sample survey of adults who report on household characteristics including such items as illnesses, injuries, use of health services, and demographic characteristics.

APPENDIX 2

1993 YOUTH RISK BEHAVIOR SURVEY

This survey is about health behavior. It has been developed so you can tell us what *you* do that may affect your health. The information you give will be used to develop better health education programs for young people like yourself.

DO NOT write your name on this survey *or* the answer sheet. The answers you give will be kept *private*. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class.

The questions that ask about your background will only be used to describe the types of students completing this survey. The information will not be used to find out your name. *No names will ever be reported.*

Place all your answers on the answer sheet. Fill in the circles completely. Make sure to answer every question. When you are finished, follow the instructions of the person giving you the survey.

THANK YOU VERY MUCH FOR YOUR HELP

INSTRUCTIONS: Read each question carefully. Fill in the circle on your answer sheet that matches the letter of your answer. CHOOSE THE ONE BEST ANSWER FOR EACH QUESTION.

1. How old are you?

   a. 12 years old or younger
   b. 13 years old
   c. 14 years old
   d. 15 years old
   e. 16 years old
   f. 17 years old
   g. 18 years old or older

2. What is your sex?

   a. Female
   b. Male

3. In what grade are you?

   a. 9th grade
   b. 10th grade
   c. 11th grade
   d. 12th grade
   e. Ungraded or other

4. How do you describe yourself?

   a. White - not Hispanic
   b. Black - not Hispanic
   c. Hispanic
   d. Asian or Pacific Islander
   e. Native American or Alaskan Native
   f. Other

5. In the past year, who did you live with most of the time? (Select only one response.)

   a. Both parents
   b. Father (all or most of time)
   c. Mother (all or most of time)
   d. Foster parents
   e. Other relatives

6. Compared to other students in your class, what kind of student would you say you are?

   a. One of the best
   b. Far above the middle
   c. A little above the middle
   d. In the middle
   e. A little below the middle
   f. Far below the middle
   g. Near the bottom

7. How often do you wear a seat belt when riding in a car driven by someone else?

   a. Never
   b. Rarely
   c. Sometimes
   d. Most of the time
   e. Always

8. When you rode a motorcycle during the past 12 months, how often did you wear a helmet?

   a. I did not ride a motorcycle during the past 12 months
   b. Never wore a helmet
   c. Rarely wore a helmet
   d. Sometimes wore a helmet
   e. Most of the time wore a helmet
   f. Always wore a helmet

9. When you rode a bicycle during the past 12 months, how often did you wear a helmet?

   a. I did not ride a bicycle during the past 12 months
   b. Never wore a helmet
   c. Rarely wore a helmet
   d. Sometimes wore a helmet
   e. Most of the time wore a helmet
   f. Always wore a helmet

10. During the past 12 months, when you went swimming in places such as a pool, lake, river, at the beach, or pond, how often was an adult or a lifeguard watching you?

    a. I did not go swimming during the past 12 months
    b. Never
    c. Rarely
    d. Sometimes
    e. Most of the time
    f. Always

11. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

12. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

13. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?

    a. 0 (zero) days
    b. 1 day
    c. 2 or 3 days
    d. 4 or 5 days
    e. 6 or more days

14. During the past 30 days, on how many days did you carry a gun?

    a. 0 (zero) days
    b. 1 day
    c. 2 or 3 days
    d. 4 or 5 days
    e. 6 or more days

15. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club **on school property**?

    a. 0 (zero) days
    b. 1 day
    c. 2 or 3 days
    d. 4 or 5 days
    e. 6 or more days

16. During the past 30 days, how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

    a. 0 (zero) days
    b. 1 day
    c. 2 or 3 days
    d. 4 or 5 days
    e. 6 or more days

17. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club **on school property**?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

18. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books on **school property**?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

19. During the past 12 months, how many times were you in a physical fight?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

20. The **last time** you were in a physical fight, with whom did you fight?

    a. I have never been in a physical fight
    b. A total stranger
    c. A friend or someone I know
    d. A boyfriend, girlfriend, or date
    e. A parent, brother, sister, or other family member
    f. Someone not listed above
    g. More than one of the persons listed above

21. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

22. During the past 12 months, how many times were you in a physical fight **on school property**?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

These questions ask you how you feel about some things.

23. Is it easy or hard for you to get along with your family?

    a. Very hard
    b. Hard
    c. Easy
    d. Very easy

24. How easy or hard is it for you to say no if you do not want to do something your friends are doing?

    a. Very hard
    b. Hard
    c. Easy
    d. Very easy

Sometimes people feel so depressed and hopeless about the future that they may consider attempting suicide, that is, taking some action to end their own life.

25. During the past 12 months, did you ever **seriously** consider attempting suicide?

    a. Yes
    b. No

26. During the past 12 months, did you make a plan about how you would attempt suicide?

    a. Yes
    b. No

27. During the past 12 months, how many times did you actually attempt suicide?

    a. 0 (zero) times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

28. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

    a. I did not attempt suicide during the past 12 months
    b. Yes
    c. No

The next questions ask about tobacco use.

29. How old were you when you smoked a whole cigarette for the first time?

    a. I have never smoked a whole cigarette
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

30. How old were you when you first started smoking cigarettes regularly (at least one cigarette every day for 30 days)?

    a. I have never smoked cigarettes regularly
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

31. During the past 30 days, on how many days did you smoke cigarettes?

    a. 0 (zero) days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

32. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?

    a. I did not smoke cigarettes during the past 30 days
    b. Less than 1 cigarette per day
    c. 1 cigarette per day
    d. 2 to 5 cigarettes per day
    e. 6 to 10 cigarettes per day
    f. 11 to 20 cigarettes per day
    g. More than 20 cigarettes per day

33. During the past 30 days, on how many days did you smoke cigarettes **on school property**?

    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

34. During the **past 6 months**, did you **try to quit** smoking cigarettes?

    a. I did not smoke cigarettes during the past 6 months
    b. Yes
    c. No

35. How old were you when you tried smokeless tobacco (chewing tobacco or snuff) for the first time?

    a. I have never tried smokeless tobacco
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

36. During the past 30 days, did you use **chewing tobacco**, such as Redman, Levi Garrett, or Beechnut, or **snuff**, such as Skoal, Skoal Bandits, or Copenhagen?

    a. No, I did not use chewing tobacco or snuff
    b. Yes, **chewing tobacco** only
    c. Yes, **snuff** only
    d. Yes, both **chewing tobacco and snuff**

37. During the past 30 days, did you use **chewing tobacco**, such as Redman, Levi Garrett, or Beechnut, or **snuff**, such as Skoal, Skoal Bandits, or Copenhagen **on school property**?

    a. No, I did not use chewing tobacco or snuff
    b. Yes, **chewing tobacco** only
    c. Yes, **snuff** only
    d. Yes, both **chewing tobacco and snuff**

38. Do you feel you could stop using tobacco if you wanted to?

    a. I do not use tobacco
    b. Yes
    c. No

The next questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, whiskey, or moonshine. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

39. How old were you when you had your first drink of alcohol other than a few sips?

    a. I have never had a drink of alcohol other than a few sips
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

40. During the past 30 days, on how many days did you have at least one drink of alcohol?

    a. 0 (zero) days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

41. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

    a. 0 (zero) days
    b. 1 day
    c. 2 days
    d. 3 to 5 days
    e. 6 to 9 days
    f. 10 to 19 days
    g. 20 or more days

42. During the past 30 days, on how many days did you have at least one drink of alcohol **on school property**?

    a. 0 (zero) days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

43. About how many cans or bottles of beer can a person drink and still drive safely?

    a. Any drinking will hurt driving skills
    b. 1 or 2 in an hour
    c. 5 to 6 if you wait 2 hours
    d. Some skilled drivers can drive safely after drinking 6 or more beers in a night

44. If you have used alcohol in the past year, how often has your drinking caused problems with your teachers or your principal?

a. Never a problem
b. Once
c. Less than once a month
d. More than once a month, less than once a week
e. More than once a week

45. If you have used alcohol in the past year, how often has your drinking caused problems with friends your age?

a. Never a problem
b. Once
c. Less than once a month
d. More than once a month, less than once a week
e. More than once a week

46. If you have used alcohol in the past year, how often has your drinking caused problems with the police?

a. Never a problem
b. Once
c. Less than once a month
d. More than once a month, less than once a week
e. More than once a week

47. If you have used alcohol in the past year, how often has your drinking caused problems with your parents or family?

a. Never a problem
b. Once
c. Less than once a month
d. More than once a month, less than once a week
e. More than once a week

48. If one of your parents has used alcohol in the past year, how often has his or her alcohol use caused you problems?

a. Never a problem
b. Once
c. Less than once a month
d. More than once a month, less than once a week
e. More than once a week

49. How do your parents/guardians or family feel about someone your age drinking alcohol?

a. They strongly approve
b. They approve
c. They don't care
d. They disapprove
e. They strongly disapprove
f. I don't know

50. How do your friends feel about someone your age drinking alcohol?

a. They strongly approve
b. They approve
c. They don't care
d. They disapprove
e. They strongly disapprove
f. I don't know

51. How do most students in your grade feel about someone your age drinking alcohol?

a. They strongly approve
b. They approve
c. They don't care
d. They disapprove
e. They strongly disapprove
f. I don't know

52. Do you feel you could stop using alcohol if you wanted to?

a. I do not use alcohol
b. Yes
c. No

The next questions ask about the use of marijuana, which is also called grass or pot.

53. How old were you when you tried marijuana for the first time?

    a. I have never tried marijuana
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

54. During your life, how many times have you used marijuana?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 to 99 times
    g. 100 or more times

55. During the past 30 days, how many times did you use marijuana?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

56. During the past 30 days, how many times did you use marijuana **on school property**?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

57. If you have used marijuana in the past 30 days, how often did you use beer, wine, or liquor at about the same time?

    a. Never use either alcohol or marijuana
    b. Never use alcohol with marijuana
    c. Less than half the time

The next questions ask about cocaine and other drugs.

58. How old were you when you tried **any** form of cocaine, including powder, crack, or freebase, for the first time?

    a. I have never tried cocaine
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

59. During your life, how many times have you used **any** form of cocaine, including powder, crack, or freebase?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

60. During the past 30 days, how many times did you use **any** form of cocaine, including powder, crack, or freebase?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

61. During your life, how many times have you used the **crack** or **freebase** forms of cocaine?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

62. How old were you when you tried LSD, PCP, or other hallucinogens (Acid, Angel Dust) for the first time?

    a. I have never tried LSD, PCP, or hallucinogens
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

63. How old were you when you first tried UPPERS (like speed or amphetamines) without a doctor telling you?

    a. I have never tried UPPERS (like speed or amphetamines)
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

64. During your life, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, heroin, or pills without a doctor's prescription?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

65. During your life, how many times have you taken **steroid** pills or shots **without** a doctor's prescription?

    a. 0 (zero) times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

66. During your life, have you ever injected (shot up) any illegal drug?

    a. Yes
    b. No

67. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?

    a. Yes
    b. No

68. If one or your parents has used drugs in the past year, how often has his or her drug use caused problems?

    a. Never used drugs
    b. Once
    c. Less than once a month
    d. More than once a month, less than once a week
    e. More than once a week

69. In the past school year, how often did you get any information on alcohol or drugs from health or other school classes?

    a. Never
    b. Once
    c. More than once

70. In the past school year, how often did you get any information on alcohol or drugs from counselors at school?

    a. Never
    b. Once
    c. More than once

71. In the past school year, how often did you get any information on alcohol or drugs from discussions with your family?

    a. Never
    b. Once
    c. More than once

72. In the past school year, how often did you get any information on alcohol or drugs from a friend your age?

    a. Never
    b. Once
    c. More than once

73. In the past school year, how often did you get any information on alcohol or drugs from classes with a uniformed DARE police officer?

    a. Never
    b. Once
    c. More than once

74. Do you feel you could stop using marijuana or other illegal drugs if you wanted to?

    a. I do not use marijuana or other illegal drugs
    b. Yes
    c. No

The next questions ask about AIDS/HIV education and information.

75. Have you ever been taught about AIDS/HIV infection in school?

    a. Yes
    b. No
    c. Not sure

76. Have you ever talked about AIDS/HIV infection with your parents or other adults in your family?

    a. Yes
    b. No
    c. Not sure

The next questions ask about body weight.

77. How do **you** think of yourself?

    a. Very underweight
    b. Slightly underweight
    c. About the right weight
    d. Slightly overweight
    e. Very overweight

78. Which **of the following** are you trying to do?

    a. **Lose** weight
    b. **Gain** weight
    c. **Stay** the same weight
    d. I am **not trying to do anything** about my weight

79. During the past 7 days, which **one** of the following did you do to lose weight or to keep from gaining weight?

    a. I did not try to lose weight or keep from gaining weight
    b. I dieted
    c. I exercised
    d. I exercised and dieted
    e. I used some other method, but I did not exercise or diet

80. During the past 7 days, which **one** of the following did you do to lose weight or to keep from gaining weight?

    a. I did not try to lose weight or keep from gaining weight
    b. I made myself vomit
    c. I took diet pills
    d. I made myself vomit and took diet pills
    e. I used some other method, but I did not vomit or take diet pills

The next questions ask about food you ate yesterday. Think about all meals and snacks you ate yesterday from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

81. Yesterday, did you eat fruit or drink fruit juice?

a. No
b. Yes, once only
c. Yes, two times
d. Yes, three times
e. Yes, four or more times

82. Yesterday, did you eat green salad or raw or cooked vegetables?

a. No
b. Yes, once only
c. Yes, two times
d. Yes, three times
e. Yes, four or more times

83. Yesterday, did you eat hamburger, hot dogs, sausage, or barbecue?

a. No
b. Yes, once only
c. Yes, two times
d. Yes, three times
e. Yes, four or more times

84. Yesterday, did you eat french fries or potato chips?

a. No
b. Yes, once only
c. Yes, two times
d. Yes, three times
e. Yes, four or more times

85. Yesterday, did you eat cookies, doughnuts, pie, or cake?

a. No
b. Yes, once only
c. Yes, two times
d. Yes, three times
e. Yes, four or more times

The next questions ask about physical activity.

86. On how many of the past 7 days did you exercise or participate in sports activities for at least 20 minutes that made you **sweat and breathe hard**, such as basketball, jogging, fast dancing, swimming laps, tennis, fast bicycling, or similar aerobic activities?

a. 0 (zero) days
b. 1 day
c. 2 days
d. 3 days
e. 4 days
f. 5 days
g. 6 days
h. 7 days

87. On how many of the past 7 days did you do exercises to **strengthen or tone your muscles**, such as push-ups, sit-ups, or weight lifting?

a. 0 (zero) days
b. 1 day
c. 2 days
d. 3 days
e. 4 days
f. 5 days
g. 6 days
h. 7 days

88. In an average week when you are in school, on how many days do you go to physical education (PE) classes?

a. 0 (zero) days
b. 1 day
c. 2 days
d. 3 days
e. 4 days
f. 5 days

89. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?

a. I do not take PE
b. Less than 10 minutes
c. 10 to 20 minutes
d. 21 to 30 minutes
e. More than 30 minutes

90. During the past 12 months, on how many sports teams **run by your school**, did you play? (Do not include PE classes.)

    a. 0 (zero) teams
    b. 1 team
    c. 2 teams
    d. 3 or more teams

91. During the past 12 months, on how many sports teams **run by organizations outside of your school**, did you play?

    a. 0 (zero) teams
    b. 1 team
    c. 2 teams
    d. 3 or more teams

The next questions ask about sexual behavior.

92. How old were you when you had sexual intercourse for the first time?

    a. I have never had sexual intercourse
    b. Less than 12 years old
    c. 12 years old
    d. 13 years old
    e. 14 years old
    f. 15 years old
    g. 16 years old
    h. 17 or more years old

93. During your life, with how many people have you had sexual intercourse?

    a. I have never had sexual intercourse
    b. 1 person
    c. 2 people
    d. 3 people
    e. 4 people
    f. 5 people
    g. 6 or more people

94. During the **past 3 months**, with how many people did you have sexual intercourse?

    a. I have never had sexual intercourse
    b. I have had sexual intercourse, but not during the past 3 months
    c. 1 person
    d. 2 people
    e. 3 people
    f. 4 people
    g. 5 people
    h. 6 or more people

95. Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?

    a. I have never had sexual intercourse
    b. Yes
    c. No

96. The **last time** you had sexual intercourse, did you or your partner use a condom?

    a. I have never had sexual intercourse
    b. Yes
    c. No

97. The **last time** you had sexual intercourse, what **one** method did you or your partner use to prevent pregnancy? (Select only **one** response.)

    a. I have never had sexual intercourse
    b. No method was used to prevent pregnancy
    c. Birth control pills/implant
    d. Condoms
    e. Withdrawal
    f. Some other method
    g. Not sure

98. How many times have you been pregnant or gotten someone pregnant?

    a. 0 (zero) times
    b. 1 time
    c. 2 or more times
    d. Not sure

99. Have you ever been told by a doctor or nurse that you have a sexually transmitted disease such as genital herpes, genital warts, chlamydia, syphilis, gonorrhea, AIDS, or HIV infection?

a. Yes
b. No

Department of Environment, Health, and Natural Resources
State Center for Health and Environmental Statistics
P. O. Box 29538
Raleigh, N.C. 27626-0538
919/733-4728

BULK RATE
U.S. Postage
PAID
Raleigh, N.C. 27626-0538
Permit No. 1862

1,000 copies of this public document were printed at a cost of $1,066.00 or $1.07 per copy.